ELECTRICAL SOUTH

AUGUST, 1950

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APPLIANCE SECTION • PAGE 49

Adv. Index, Pages 93 and 94

IS A FEATURE OF *Wakefield* LIGHTING EQUIPMENT

Almost like hanging a picture . . .

Everything hooks on to pre-installed straps . . .

A one-man job . . .

The secret is the pre-installed strap. First step is to secure a mounting strap to the outlet box. Next run a chalk line along the ceiling, measure off the required intervals and then attach the other mounting straps in the line. The easily assembled units are then hung on the mounting straps, unit by unit, the supporting band on the previously mounted unit providing the reflector support for the end of the next unit. A steel channel insures rigidity for the wireway, and snap-on wireway covers give accessibility for wiring. Writes one power company engineer: "Contractors have been vociferous in their praise of the ease with which they were able to install your fixtures."

1. **Fully Guaranteed**
2. **A.F. of L. Labels**
3. **Underwriters Approved**
4. **Certified Ballasts**

Catalog No. 50 just off the press—write for your copy!

The F. W. Wakefield Brass Co., Vermilion, Ohio

Bring on your weather!

Here's a really waterproof switch!

WATERPROOF . . . *Inside and Out*

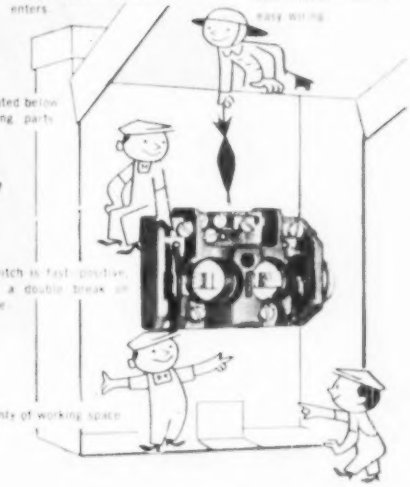
No matter what the weather conditions—rain—snow or ice—you can put up this Murray switch with confidence that it will last! It's weatherproof. Inside and out!

Flanged sides of top welded to cabinet.

No corrosion problem. Cabinet is made of a special rust-resistant steel. Melamine, an armor-like finish, is baked-on for positive protection.

Tight, water-proof seal where switch handle enters.

Knockouts located below current carrying parts.



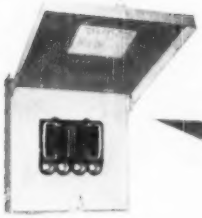
Solderless connections for easy wiring.

Rotor switch is fast, positive, provides a double break on each pole.

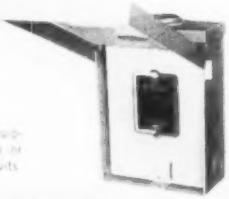
Plenty of working space.

Flanged sides of bottom welded to inside of cabinet.

Rotor housed in porcelain block that quenches arc.



Another famous Murray switch! Main Entrance—Pullout type. Incorporates all the weatherproof features.



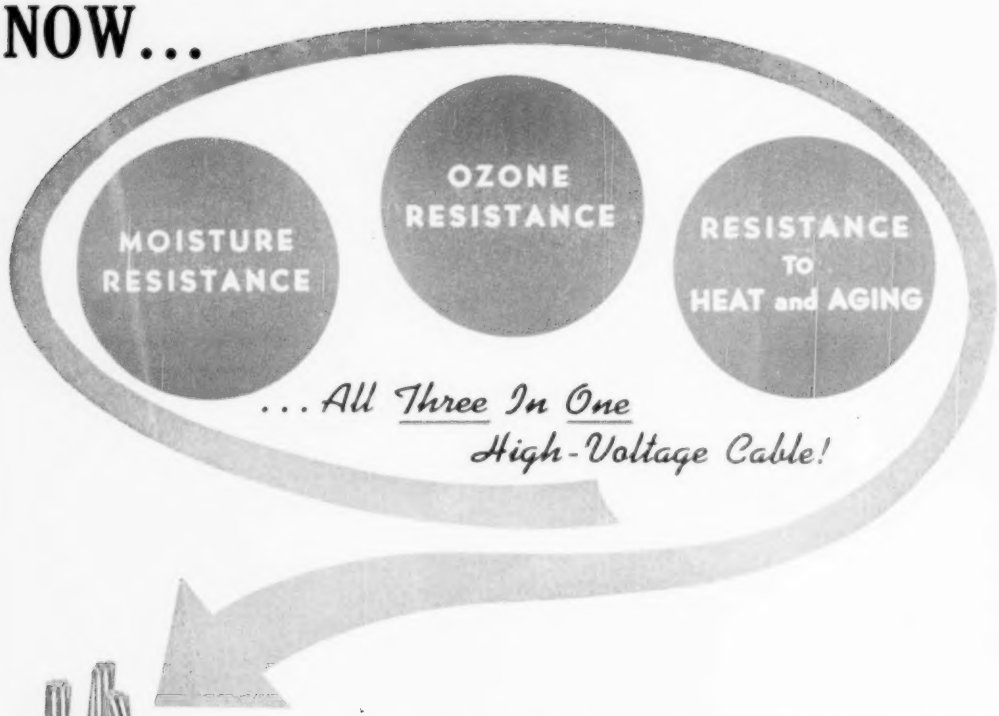
Main and range service equipment. Can be ordered with or without branch lighting circuits. Dead front construction.

Listed by Underwriters' Laboratories, Inc.

Murray MANUFACTURING CORPORATION
1250 ATLANTIC AVENUE • BROOKLYN 16, N. Y.

Electrical Safety Devices For Home and Industry

NOW...



Study the facts behind high-voltage cable failures and you'll readily realize just how much moisture resistance, ozone resistance, and resistance to heat and aging mean to high-voltage transmission and distribution systems. Now — for the first time — all three properties are combined in a single insulation, Anhydrex XX — available only in Simplex-ANHYDREX XX Cables.

Aged in an air oven at the grueling temperature of 250 F. (121 C.), Anhydrex XX has proved itself to be far and away your most dependable assurance of low-cost, trouble-free cable operation at the higher voltages. Here's how:

Aged for 16 weeks, it retained approximately 50% of its tensile strength, nearly 68% of its elongation. More than that, its rate of deterioration after the first few weeks was very slight, indicating exceptional stability and long life. It remained rubber-like in quality and appearance and was still suitable for further use. Compare this with ordinary vegetable oil base and heat-resistant compounds which, inside of only 3 weeks, became brittle and cracked and crumbled.

Aged for 7 days, Anhydrex XX was immersed for a week in distilled water at 158 F. (70 C.) and absorbed less than 15 mg. per square inch of exposed surface.

Aged for 7 days, it was bent around a mandrel and exposed to 0.6% ozone for 4 hours yet would not crack.

Compare these values with those of any other high-voltage insulation. You'll find a big difference; a difference that pays off in more economical, more efficient, and more reliable power transmission whenever Simplex-ANHYDREX XX Cables are on the job. If you would like more complete information and specification data on Anhydrex XX, simply drop us a line at the below address.

SIMPLEX WIRE AND CABLE COMPANY
79 Sidney Street, Cambridge 39, Massachusetts

ELECTRICAL SOUTH

SERVING THE 15 SOUTHERN AND SOUTHWESTERN STATES

August, 1950 — Vol. 30 – No. 8

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FRANCES J. BLACK, *Assistant Editor*

BARON CRAGER, *Southwestern Editor*
(1405 National City Bldg., Dallas, Tex.)

T. W. McALLISTER, *Vice-Pres., Editorial Director*

FRANK P. BELL, *Business Manager* — T. A. MOODY, *Production Manager*

Editorial and Business Offices

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Atlanta 5, Georgia

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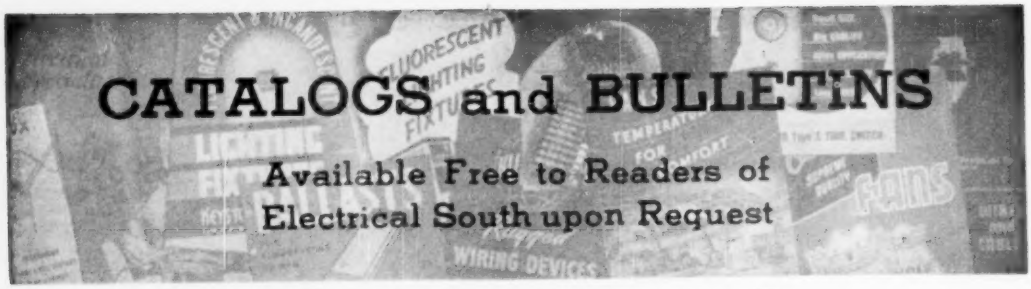

CATALOGS and BULLETINS

Available Free to Readers of Electrical South upon Request

(Additional items will be found on pages 8, 56 and 57)

1008—Electrical Equipment. The latest edition of the Federal catalog has just been issued by Federal Electric Products Co., 60 Pine St., Newark 5, N. J. This profusely illustrated catalog contains complete details of Federal's newest motor controls, safety switches, service equipment, circuit breakers, panelboards, switchboards, and busbar.

1020—Electrical Maintenance. Available immediately is a new 48 page reference and instruction booklet issued by the Anaconda Wire and Cable Co., 25 Broadway, New York 4, N. Y. Entitled "Wire Ahead," this book covers a variety of problems encountered in electrical system maintenance.

1024—Cords and Cables. The Simplex Wire & Cable Co. has just issued an attractive 68 page catalog giving descriptions of the Simplex Fuzz portable cords and cables. Complete information on splicing is also included, as well as a pictorial section on applications. It may be obtained from 79 Sidney St., Cambridge 39, Mass.

1028—Porcelain Insulators. A loose leaf catalog of porcelain insulators and pole line hardware is available from Illinois Electric Porcelain Co., Macomb, Illinois. In addition to the pages of product specifications, the catalog contains a special section of useful tables.

1030—Condensed Lighting Catalog. This 8 page descriptive bulletin issued by Pittsburgh Reflector Co., 430 Oliver Bldg., Pittsburgh 22, Pa., describes in detail the most popular items in the Pittsburgh line of fluorescent and incandescent lighting equipment. Each item is fully illustrated and catalogued, and many are accompanied by installation drawings.

1032—Receptacles, Plugs, and Connectors. Russell & Stoll Co., Inc., 125 Barclay St., N. Y., has released a bulletin No. EL 446, describing the new Eye-Lok receptacles, plugs and cord connections for 30 amperes, 440 volts a.c. Legend uses are for heavy duty industrial purposes.

1034—Building Wire. A fully illustrated 48 page booklet called "Hazard Building Wires" is now available from the Hazard Insulated Wire Works Division of The Okonite Co. The manual contains complete engineering information on the more types of wire and cable required by the building industry. Tables showing dimensions and weights of all cable constructions are included.

1040—Lighting Fixtures. A colorful, well illustrated, 32 page catalog has been made available featuring industrial, commercial and residential lighting with technical description and engineering data. The catalog, No. 45, may be obtained from the Keystone Mfg. Co., 2528 N. 4 Twenty St., Philadelphia 34, Pa.

1042—Wire and Cable. An illustrated booklet containing descriptions of thermoplastic building wires, rubber insulated and leaded building wires and cables, Flamenol cords, rubber cords, Neoprene cords, and many other items has been published by the General Electric Co., Bridgeport 2, Conn.

1044—Cords and Cables. New illustrated catalog sheets and descriptive pamphlets showing advantages of Brown-Neoprene cords and cables have been made available by Western Insulated Wire Co., 1001 East 62nd St., Los Angeles 1, Cal.

1046—Fluorescent Fixtures. The usual types of fixtures and their wide applications are described and illustrated in a colorful catalog released by Southern Lighting Mfg. Co., Orlando, Fla. Lighting for stores, offices, industry, and schoolroom is discussed thoroughly with technical information and a price list included.

1048—Plug In Strip. A complete revision of Catalog CF 2 has recently been published by National Electric Products Corp., Pittsburgh, Pa. This 8 page illustrated brochure features the 5 ft. and 6 ft. standard lengths of the redesigned multi-outlet branch circuit assembly. Several pages are devoted to detailed instructions for cutting the Plug In strip on the job.

1050—Magnetic Starters. This 8 page bulletin No. 4110B, published by the Ward Leonard Electric Co., 31 South St., Mount Vernon, N. Y., gives complete information concerning application, size classification, construction features, enclosure dimensions and other important data pertaining to the company's newly designed magnetic starters.

ELECTRICAL SOUTH
806 Peachtree St., NE
Atlanta 5, Ga.

August, 1950

Gentlemen:

Please send me the bulletins and catalogs indicated.

(Print Plainly)

Name Title

Company

Address

City & State

Circle numbers below. Bulletins and catalogs will be mailed promptly.

1008	1020	1024	1028	1030
1032	1034	1040	1042	1044
1046	1048	1050	1054	1056
1058	1060	1062	1064	1066
1068	1070	1072	1074	1076
1078	1080	1082	1084	1086
1088	1090	1092	1094	1096
1098	1100	1102	1104	1106
1108	1110	1112	1114	1116
1118	1120			

The ADVANCED DESIGN FEATURES of the

KEARNEY Type "T" TRIP-OUT

200 AMPERE

Assures You of

Better Protection

of Equipment on Lines Up to 15,000 Volts

Here's why—

- Silver to silver contacts for heavy loads
- High conductivity copper current path through switch
- Floating top contact to assure proper contact alignment
- Fuse cartridge opens at both ends — assures rapid expulsion of arcing gases and high interrupting capacity
- Wide cartridge hinge assure proper contact engagement when switch is closed

For complete detailed information including prices, write today.

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JAMES R. KEARNEY CORPORATION • 4224-42 Clayton Ave., St. Louis 10, Missouri

Canadian Plant: Guelph, Ontario

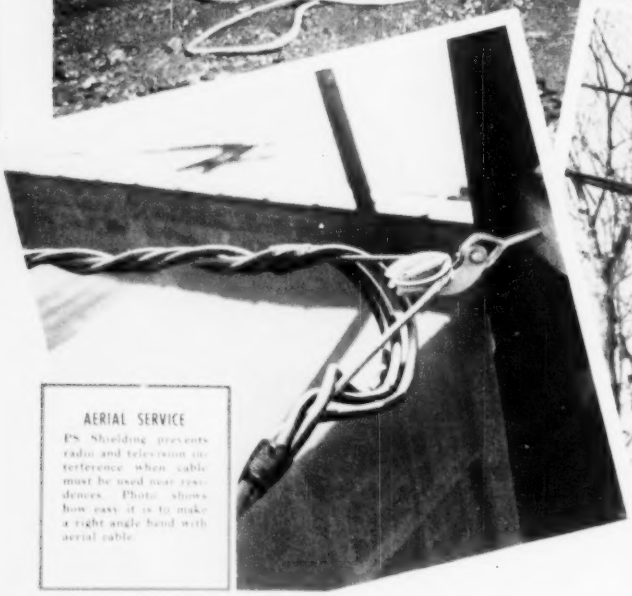
BETTER CONSTRUCTION *Safer* MAINTENANCE

SHORT-CIRCUIT YOUR CABLE TROUBLES

Prevent CORONA DISCHARGE · SHOCK HAZARDS · RADIATION

ON THE GROUND SERVICE

PS Shielding assures maximum safety when cables must withstand brutal service like this.



AERIAL SERVICE

PS Shielding prevents radio and television interference when cable must be used near residences. Photo shows how easy it is to make a right angle bend with aerial cable.

LONGER LIFE

When insulated cables are used to eliminate tree trimming, PS Shielding means longer cable life. Because it clings tightly to the insulation and eliminates gaps that cause corona discharge.

with PS Shielding

What it is—

PS Shielding consists of a fibrous tape coated with a conducting rubber. This tape is vulcanized to the surface of the conductor insulation. It may be used next to the conductor or over the outer surface of the insulation in contact with the usual shielding tape, ground wire or conducting sheath.

What it does—

Type PS Shielding eliminates many of the weaknesses of metal shielding. For when a cable is bent and straightened, *metal* shielding tends to separate from the insulation. This forms an air gap that causes spark discharge with corona and ozone formation. But Type PS Shielding remains flexible. It clings tightly. It eliminates those destructive air gaps.

Proven performance—

To prove just how effective PS Shielding is, we drove *spikes* through the shielding into the conductor *without* touching the ground wires. In every case, the overload breakers tripped. Proving that PS Shielding *by itself* is an effective safety measure.

PS Shielding was developed by the American Steel & Wire Company. And it has proved so effective that other cable companies have been licensed to use the same construction. It is most widely used for portable power cable, aerial distribution lines and heavy power cable wherever voltage discharge will cause damaging corona and resultant television interference.

PS Shielding is available applied to both single and multiple conductor cables, sheathed to meet many different applications. Write for complete information.

Each conductor in these cables is separately insulated. And each conductor is separately shielded with PS Conducting Tape, your guarantee of long-life service and safety.

AMERICAN STEEL & WIRE COMPANY, GENERAL OFFICES: CLEVELAND, OHIO
COLUMBIA STEEL COMPANY, SAN FRANCISCO
TENNESSEE COAL, IRON & RAILROAD COMPANY, BIRMINGHAM, SOUTHERN DISTRIBUTORS
UNITED STATES STEEL EXPORT COMPANY, NEW YORK

American Electrical Wire and Cable

UNITED STATES STEEL

1054—Fluorescent Fixtures. Catalog No. 48 illustrates the commercial, industrial and residential designs offered by the Kavlane Co. Featured are troffers, glass and louver type, recessed incandescent units, and many others. The catalog is available from the Kavlane Co., 2480 E. 22nd St., Cleveland 15, Ohio.

1056—Lighting Products. Forty-one pages of description, specifications, and illustrations of Spero's five lines of electrical products are included in a newly issued catalog. The five lines include fluorescent fixtures, reflectors, vapor proof units, flood lights, and materials for electrical construction. The booklet is available from the Spero Electric Corp., 18222 Lanken Ave., Cleveland 19, Ohio.

1058—Conductor Fittings. A complete catalog, illustrated and listing prices, has been issued by Penn-Union Electric Corp., Erie, Pa. Described is the company's complete line, including a wide variety of service connectors, terminals, tees, and taps, also many other types of conductor fittings.

1060—Electrical Materials. Three informative bulletins, No. 1 entitled Lightning Arresters Data, No. 2, Wire Stringing Tool Data, and No. 3, Hub-Rak Data on Secondary Distribution, have been released by Hubbard and Co., Pittsburgh 1, Pa.

1062—Fuses. Listed by Underwriters' Laboratories, the Pierce renewable fuses are fully described in an illustrated folder which may be obtained from Pierce Renewable Fuses, Inc., 211-219 Hertel Ave., Buffalo 7, N. Y.

1064—Lighting Plans. Set of 45 printed plans showing diagrams and complete specifications for flood lighting, sports arenas, courts, playing fields and stadia as well as buildings, displays, etc. Particularly valuable to planning boards and contractors. Write S & M Lamp Co., 119 W. 36th Place, Los Angeles 7, Calif.

1066—Residential Fixtures. Brasses Products, Inc., Dept. FS, Port Chester, N. Y., announces the publication of a catalog featuring a line of residential indoor and outdoor fixtures. The catalog may be obtained by writing to the manufacturer.

1068—Wire and Cable. Rome Cable Corporation, Rome, N. Y., has just published a new "Bare and Weatherproof Wire and Cable" catalog, No. 22. By word and picture the story of Rome wire and cable including specifications and a technical section, is brought to the reader.

1070—Fluorescent Lamp Ballasts. General Electric's Specialty Transformer and Ballast Division, Schenectady 5, N. Y., have announced as available a new 20 page illustrated bulletin. The bulletin gives complete information on the installation, operation and testing of ballasts for fluorescent lamps. Write General Electric for Bulletin GET-922-B.

1072—Fluorescent Fixtures. An illustrated folder describing Rib-Lite Carbon Fixtures is now available from the Standard Rib-Lite Co., Brighton, Pa. Nine Rib-Lite models are described.

1074—Carbon Brushes. A new 112-page illustrated catalog devoted exclusively to electrical for motor brushes used on small appliances, refrigerators, portable tools, vacuum cleaners, and fans, is now available from the Southern Carbon Brush Co., Inc., P. O. Box 1710, Birmingham 1, Ala. This is a handy reference book for the electric motor repair shop.

1076—Modular Lighting. A 20 page booklet containing interesting and useful information about the "modular system" of lighting can be obtained by writing to the Mitchell Manufacturing Co., 2525 Clybourn Ave., Chicago 14, Ill.

1078—Electrical Fittings & Devices. This is a 16 page catalog covering solderless connectors, cable and conduit fittings, and wiring devices, announced by Buchanan Electrical Products Corp., 1290 Central Ave., Hillside, N. J. It contains complete data on "Splice Caps" and "Terminal" lugs for wire splicing and terminating, box connectors for metallic and non-metallic sheathed cable, both plain and insulated conduit bushings, conduit locknuts, knockout plugs, terminal blocks, attachment plugs, fuse pullers, etc. Suitable illustrations, dimensional data and application instructions are included.

1080—Farm Lighting Equipment. Bulletin No. 122-50, available from Steber Manufacturing Co., Broadview, Ill., lists a new line of Steberlite Lampholders, Yardlights, Haymowlites, and Coverlites.

1082—Lighting Equipment. Just off the press is Catalog No. 50, available from the F. W. Wakefield Brass Co., Vermilion, Ohio. The catalog covers full engineering data on fluorescent equipment in luminous indirect and direct-indirect for both standard and Slimline lamps.

1084—Portable Cords and Cables. Two new catalogs, 1011, Portable Cables, and 992, Portable Cords, have just been issued by Simplex Wire & Cable Co., 79 Sidney St., Cambridge 39, Mass., on Simplex Tirex portable cords and cables for 600 volt.

1086—Connectors and Couplings. Linne-Soley and Engineering Co., 4864 Woodward Ave., Detroit 1, Mich., now have available catalog sheets containing data on the complete line of their connectors, couplings and cable connectors.

1088—Fittings and Fixtures. A 24 page illustrated catalog covering Killark fittings and fixtures is offered by Killark Electric Mfg. Co., Vandeventer and Eichun Aves., St. Louis 13, Mo.

1090—Midget Size Busduct. Complete information on Power Plugin, the new, midget-size busduct, is found in bulletin No. 505, available from Frank Adam Electric Co., 3650 Winslow Pl., St. Louis 13, Mo.

1092—Electrical Boxes and Conduit Fittings. Steel City Electric Co., 1207 Columbus Ave., Pittsburgh 12, Pa., offers a catalog of their complete line.

1094—Photoelectric Controls for Street Lighting. A four page catalog sheet, Bulletin 63500, gives full information on photoelectric controls available from Fisher-Pierce Co., Inc., 50 Ceylon St., Boston 21, Mass.

1096—Fastening Devices. An illustrated bulletin of electrical fastening devices for EMT, armored and non-metallic sheathed cable, featuring the No. 7491 Sherson Staple, is now available from the Sherman Mfg. Co., St. Louis 13, Mo.

1098—Fluorescent Lighting Fixtures. A complete catalog of the Compco fluorescent line is available from Compco Corp., 2251 W. St. Paul Ave., Chicago 47, Ill.

1110—Flexible Cords and Portable Cables. Bulletin H-450, a 48 page illustrated booklet describing Hazard cords and cables, is being offered by Hazard Insulated Wire Works Div. Okonite Co., Wilkes-Barre, Pa.

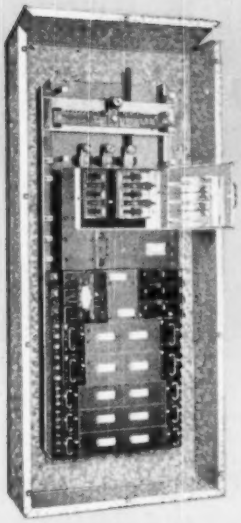
1112—Shutters and Dampers. Air Conditioning Products Co., 2346 W. Lafayette Blvd., Detroit 26, Mich., has made available an 11 page illustrated catalog No. 44 describing their line of shutters and dampers.

1114—Q. L. Panelettes. A new 8 page bulletin on Federal Nook Q.L. Panelettes has been announced by Federal Electric Products Co., 80 Paris St., Newark 2, N. J.

1116—Lugs and Connectors. Kearney—Hodgepiel, 5-E. 3rd St., Cincinnati 2, Ohio, has made available a fully descriptive catalog No. 51C on solderless terminal lugs and connectors.

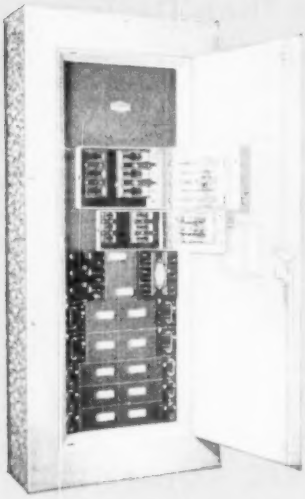
1118—Fluorescent Fixtures. A 16 page catalog, "Fluorescent Slimline and Recessed Fixtures," describes the line manufactured by Stanley Electric Mfg. Co., 234 Carpenter St., Philadelphia 47, Pa. Fixtures designed especially for commercial, industrial, residential, and school needs are illustrated, and some are accompanied by dimensional diagrams, candlepower distribution curves, and diagrams of special features.

1120—Recessed Lighting. A four-color illustrated 24 page catalog on recessed lighting fixtures is now available from The Kurlan Co., 3455 E. Jefferson Ave., Detroit 7, Mich. This covers the recent improvements in the most popular line, where through the use of a heat-insulated junction box on the fixture, no asbestos wire is required for installing.



Re-designed inside and out

FA FEEDER PANELBOARD



LESS SPACE IS REQUIRED for the same panelboard requirements in the *re-designed* FA FEEDER PANELBOARD . . . without sacrificing such popular FA features as generous wiring space and ease of installation.

This improved, compact FA FEEDER PANELBOARD is built of standardized units and assembled as required for specific application. Four standardized widths, 10 standardized heights and 3 standardized depths of boxes meet any requirement. Boxes are shipped from stock . . . with removable ends to permit drilling conduit openings on the job. Panels are readily installed after boxes are in position.

Two dependable FA Switches . . . the FA PULFUZSWITCH and the FA KLAMPSWITCHFUZ . . . make these feeder distribution panelboards the finest in safety and efficiency. Both types combine switch and fuse in one unit so that current is OFF when the door is opened, or the fuse carrier removed. This makes replacement of fuses safe . . . quick . . . simple.

In operation, the switch blades make pressure contact with the fixed switch parts, assuring full current-carrying capacity. Silver-plated contact parts insure low resistance to current flow, and reduce heating.

FA PULFUZSWITCH capacities: 30, 60 and 100 amps., 250 volts AC or DC; 30 and 60 amps., 600 volts AC, 2, 3 and 4 pole.

FA KLAMPSWITCHFUZ capacities: 30 to 600 amps., 250 volts AC or DC; and 30 to 200 amps., 600 volts AC in 2, 3 and 4 pole types, single or double throw.

For more information about the *re-designed* FA FEEDER PANELBOARD, talk it over with your FA Representative (he's listed in Sweet's).

Frank Adam Electric Co.

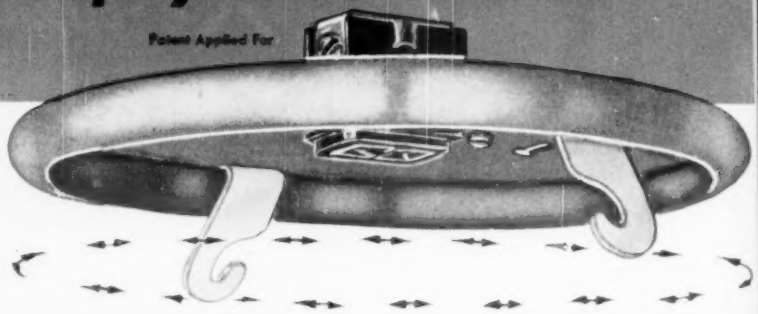
ST. LOUIS 13, MISSOURI

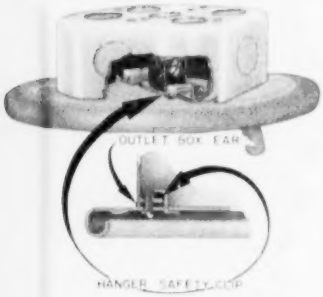
Makers of **BUSDUCT • PANELBOARDS • SWITCHBOARDS • SERVICE EQUIPMENT • SAFETY SWITCHES • LOAD CENTERS • QUIKHETER**

AT LAST! A Really SAFE Fluorescent Fixture Hanger

Prevents Injury to Personnel!

Patent Applied For





Should screws vibrate or rust through, fixture will stay up—supported by exclusive safety clips (arrow) which rest on ears of outlet box.

Appleton Type "SFH" Fixture Hanger
For Use with Appleton 4-O or 4-OD Outlet Boxes

Costs No More Than Ordinary Fixture Hangers—*Yet Gives You . . .*

- Double Protection Against Falling!
- Sliding hooks to permit instant, permanent alignment!
- Easy installation—Just loosen screws, mount, tighten!
- Better looking installation!
- Quality approved by safety engineers everywhere!

Pear-shaped screw holes permit speedy mounting to outlet box without removing outlet box screws. A 10-degree turn seats hanger in position with hanger clips over outlet box ears. Complete with two five-foot chains, hooks and cord clips—or hanger may be purchased separately. Two-wire receptacle or three-wire twist-lock receptacle.

APPLETON
SAFETY SWIVEL HANGERS

TYPE "SSH"

Patent Applied For

Designed to assure adequate support for heavy duty lighting fixtures used in industrial installations. Entire weight of suspended unit is carried by a fixture stud, greatly increasing load capacity of hanger unit.

SOLD THROUGH ELECTRICAL WHOLESALERS

APPLETON ELECTRIC COMPANY

1754 WELLINGTON AVENUE · CHICAGO 13, ILLINOIS

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APPLETON ELECTRIC PRODUCTS

APPLETON

CONDUIT FITTINGS • LIGHTING EQUIPMENT • OUTLET AND SWITCH BOXES • EXPLOSION-PROOF FITTINGS • REELITES

UNCLE SAM — BUSINESS COMPETITOR

No. 1 in a series of editorial messages

ONE of the long-range objectives of socialism is government ownership and operation of the means of production—or, in other words, nationalization of industry.

From that viewpoint it may seem that socialism has not gained much of a foothold in the United States. For as we look about we note that those business enterprises with which we are most familiar—the local stores and factories—still seem to be operating much the same as ever. They are still under private ownership and control. Though burdened with heavy taxes and hampered by governmental regulations, they are still a part of our free enterprise system.

Yet, our genial Uncle Sam, usually characterized as a be-whiskered old gentleman who exercises a benevolent supervision over the destinies of the nation, is rapidly becoming a sort of "meddlesome Mattie" whose grasping fingers are acquiring direct control over much of the business and industry of this country.

Throwing a wrench in the machinery.

The report of the Hoover Commission, a bi-partisan group of business and governmental experts who spent nearly two years in detailed study of ways and means of bringing greater efficiency into operation of the federal government, devotes much critical attention to the more than 100 different business activities now conducted by the government. Among these are the production, distribution and sale of electric power and fertilizer; operating ships and railways; lending money, guaranteeing loans, writing insurance; buying and selling farm products, and smelting and selling minerals.

In these various business enterprises the federal government now has direct investments of some $20 billion, with additional authorized commitments of $14 billion, and with vastly greater commitments in the form of guarantees on deposits and mortgages and in government life insurance. And in most of these varied activities the government is in direct competition with private business enterprises.

No private financial institution can compete with the government in lending losses. For government can lend at lower rates and need not be so careful about security or collateral, since the losses on its loans will be underwritten by the taxpayers—and have been—in some recent widely-publicized RFC cases.

Among the several governmental agencies now making direct loans to individuals and companies are the Federal Reserve Banks, the Farmers Home Administration and the RFC. The latter, originally set up strictly as an emergency organization to help battle the depression of the early 30's, has been continued through years of prosperity, though obviously, as was pointed out by the Hoover Commission, any direct-lending activities by government may lead to waste, favoritism, political pressure, or corruption.

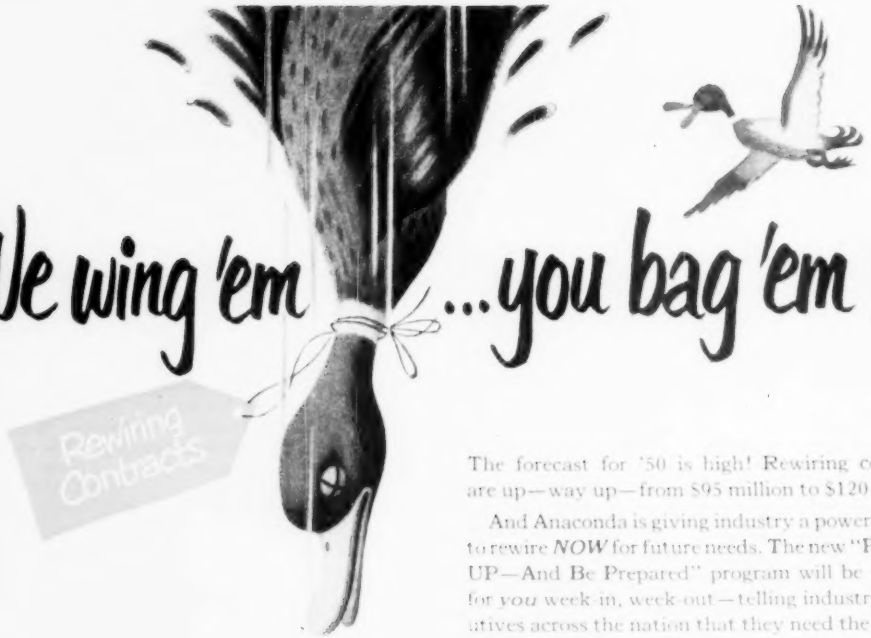
In the field of electric power development the federal government has become a major factor; and this development is no longer disguised as merely incidental to flood control, navigation and reclamation projects.

Installed generating capacity of public power agencies had expanded to more than 12½ million kw by the end of 1949, a more than five-fold increase in the last 17 years, and is now equal to 25% of total private capacity. Continued expansion of federal power and water resource projects is indicated in the 1949 expenditures of $702 million and the budget estimates of $914 million for 1950 and over $1.1 billion for 1951.

In such fields as public housing, government lending and federal power production are notable examples of the strides which government is likely to take, once it starts in any field of business activity.

It's easy to start—but difficult to stop, or curb. For these federal programs mean a continued flow of easy money, more jobs to pass out, more power for federal officials. But they also mean increased federal deficits, more government competition, and a continued trend toward a socialistic state.

We wing 'em ...you bag 'em!

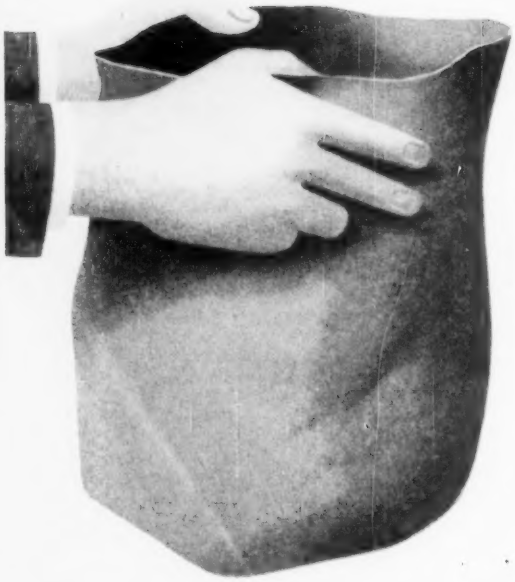


The forecast for '50 is high! Rewiring contracts are up—way up—from $95 million to $120 million!

And Anaconda is giving industry a powerful push to rewire *NOW* for future needs. The new "POWER UP—And Be Prepared" program will be working for *you* week-in, week-out—telling industrial executives across the nation that they need the benefits of complete electrical modernization.

Tie in with this all-out Anaconda drive. Ask your Anaconda wholesaler for your free "Contractor Sales Kit," today! In it you'll find your own copy of "POWER UP—And Be Prepared," a complete guide to wiring systems and their maintenance . . . direct mail pieces, booklets, letters, sales helps . . . all the ammunition you need wrapped up in one neat package.

Call your industrial customers now. Arrange to give their plants an over-all electrical check-up. Help them to "POWER UP—And Be Prepared!" Anaconda Wire & Cable Company, 25 Broadway, New York 4, New York.



This symbol means business for YOU in Anaconda's new wiring Modernization campaign directed to all industry using electric power.

The right cable for the job

ANACONDA®

WIRE AND CABLE

OUR READERS SAY—

Readers are invited to make use of these pages to express their own views on timely subjects.

Protecting Wiring From Lightning

◆ THERE IS A PHASE of the contracting business that most of us are neglecting and which should be promoted more and that is the protection of individual wiring from lightning.

We have recently analyzed a number of our recurring service calls and we have found that many of these "outs" have been caused by lightning surges which can short out water heater elements and yet not blow the fuse or trip the circuit breaker because of its short duration.

Probably most all of the equipment manufacturers have devices that are suitable for use in protecting the individual pump and heater installation. A type which we are now starting to install wherever possible is made by GE and may be connected to either the line side or load side of the meter. It is designed for installation by the contractor on secondary circuits and gives full protection by draining this excess charge into the ground. This is called the pellet type and their studies show that this voltage usually is 1500 or better and that it does its damage in 60 one-millionths of a second. This current can easily jump across the immersion heater elements in a water heater and knock them out without blowing the fuse.

This lightning current is much more prevalent on country lines than in the city, and as more rural lines are built this trouble is likely to increase. Some of the things that are now known to be caused by lightning on rural lines are motor burnouts and grounds, water heater and stove element failures, and electric pump motor failures. The flashover makes a path for the normal voltage to follow, which makes the lightning that much more elusive as the instigator of the trouble.

The use of such lightning arrestors on most of the new jobs will be good business for electrical contractors, because it will result in better satisfaction for customers who are often quick to blame the equipment or the wiring for lightning damage.

Such installations will probably add less than $10 to the customer's cost, and while it may knock the contractor out of a few service calls, it will probably make him new contracts in the future.

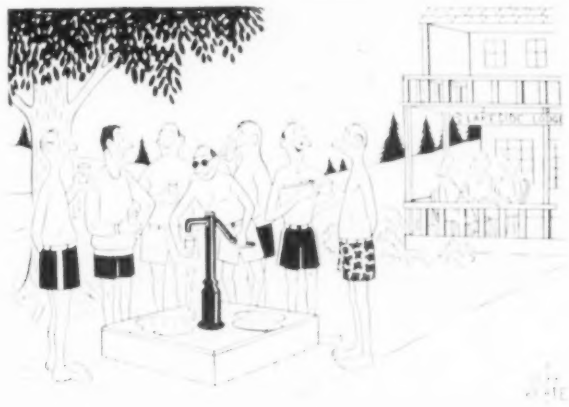
My company is starting the installation of this equipment on some of our most troublesome jobs as a means of eliminating trouble from lightning during the lightning season in our territory next spring. We are going to keep accurate records of their efficiency and these will be made available to you for publication in ELECTRICAL SOUTH if you desire them. We'd like to hear more about individual lightning arrestors protection in other areas.—**J. C. Crane, White Crane Co., Electrical Contractors, Eldon, Mo.**

Likes June Issue

◆ THIS MONTH'S issue (June) was the best ever in ELECTRICAL SOUTH. I have read it from "kiver to kiver" . . . the new type faces used are very pleasing and cheery. The feature articles were very good, and every one had a terrific money making punch for the readers. The one on how to get salesmen to work with the silverware idea was amusing as well as effectual . . . we poor salesmen, always some gimmick to make us push harder! —**Jerry Trosclair, Manufacturers' Representative, New Orleans, La.**

Interested in Overhead Figures

◆ IN VIEW of the fact that the government is taking so much of our profits these days, we have



"I can see those poor guys back at the office right now . . . with nothing better to do than stand around the water cooler, chewing the fat . . . ."

No place for Rip Van Winkles

TWENTY years bring changes--changes far greater in our fast-moving world than ever happened in Rip Van Winkle's day.

Americans are awakening to unpalatable facts--that the enterprise system which built our nation and made it strong is being subtly undermined; that advocates of backdoor socialism and communism thrive in our midst; most dangerous of all, that our young people are misinformed on economics.

For example, a recent survey of high school seniors reveals that they estimated that it takes only an $81 investment to provide a job. Actually, as shown by the 1947 census, the 2256 establishments of the iron and steel industry invested $545 per worker that year alone in *new* plant and equipment. Total investment to provide one job runs well above $10,000.

These youth had a similarly distorted picture of profits. They believe shareholders receive 24¢ of the sales dollar whereas they receive an average of less than 3¢.

Misinformed minds are a ready field for imported false philosophies. And it is up to you, a business leader in your community, to take responsibility toward correcting these misunderstandings. The American businessman must not permit himself to be lost in Rip Van Winkle befuddlement.

The Youngstown Sheet and Tube Company

General Offices--Youngstown 1, Ohio
Export Offices--500 Fifth Avenue New York

MANUFACTURERS OF CARBON ALLOY AND YOLOY STEELS

ELECTROLYTIC TIN PLATE - COKE TIN PLATE - WIRE - COLD FINISHED CARBON AND ALLOY BARS - PIPE AND TUBULAR PRODUCTS - CONDUIT - RODS - SHEETS - PLATES - BARS - RAILROAD TRACK SPIKES.

"We can't teach her a thing about our business—I mean the blonde, of course!"

had to cut down our expenses, particularly management salaries, to keep our overhead expense percentage on an even keel.

I am always interested in statistics on overhead comparisons between different companies. I submit herewith figures for our 1935-1945 average, and the 1949 overhead expenses figured as a percentage of gross sales.

Overhead Expense Comparison

Item	Percentage of Gross Sales 1935-45	1949
Taxes	2.17	8.96
Management Salaries	13.71	6.14
Advertising	1.47	2.48
Other Salaries	1.92	2.37
Rent	3.65	2.23
Sales Expense	.91	1.37
Auto Truck Expense	1.22	1.26
Insurance	1.56	1.12
Loss on accounts	.38	1.08
Depreciation	.70	.76
Books & Mag. Memberships and Dues	.20	.53
Printing, Stationery and Office Exp.	.23	.48
Light, Power, Heat & Water	.20	.43
Telephone Telegraph & Postage	.43	.39
Miscellaneous Expense	.33	.15
Legal & Auditing	.01	.08
Interest	.16	.00
Total	28.50%	29.00%

I am just wondering if such overhead expense is typical of other companies' statistics.—**Dale H. Watt, president, Watt Plumbing, Air Conditioning and Electric Co., Tulsa, Okla.**

Dealer Watt's overhead percentage may vary somewhat from other contractor-dealers' figures because his business includes air conditioning and plumbing as well as appliance and electrical installation service. For comparative purposes, however, the following national average of appliance dealers' 1949 operating costs may be of interest. (These figures are the result of a survey conducted by Nuvda.)

Item	% of Gross Sales
Owners and in business salaries	2.3
Office salaries	2.9
Salesmen's Pay	5.3
Service wages and expenses	4.7
Delivery expense	1.7
Office Administrative expense	1.3
Occupancy expense	7.6
Advertising expense	2.2
Bad debt losses	.02
All other expenses	1.3
Total operation costs	27.0

Trench Lay Cable Problem Solved

◆ THE SOLUTION of one of our installation problems ought to prove helpful to other electrical contractors who might run into the same difficulty we encountered.

By way of introduction, the Lake Vista Section and one of our local airports and certain other sections of the Lake Pontchartrain shoreline are earth fills made by pumping and dredging the lake bottom and retaining the solids behind a concrete retaining wall or sea wall. This fill is a mile wide in some places.

We assumed this soil was no different from the soil found in New Orleans proper. On jobs in this area we used the standard trench-lay RJ cable, it had shown good service on our jobs elsewhere in the city. In fact, on most of our jobs the cable was still in good condition after 15 to 20 years of service.

Much to our surprise, this standard RJ cable began to go out on us within two years of the time it was laid. The insulation broke down and deteriorated and lost its dielectric strength. For a while we were puzzled. Finally we decided the soil in this fill was different from the soil of the "solid ground" farther back from the shoreline. We concluded it was acid; however, we never had a laboratory test made to determine if it was acid or alkaline.

Acid or alkaline, an electrolysis must have been set up which ate away the insulation in the comparatively short time of two years.

We had learned about the lasting qualities of cables insulated with the new synthetic coatings. We decided to try them. We ruled out the RLJFJ cable, having found out that even the steel and lead wrappings of this type would not withstand the destructive electrolysis.

On some of our jobs in this filled soil these synthetic cables have been in use for ten years, and they are still giving good service. We believe we have the "acid" or electrolysis problem licked. Other electrical contractors should give a lot of thought to this problem if they are dealing with a new type of soil not previously encountered. This problem is most likely to come up on new ground made along river banks, lakes, etc. Gulf coast contractors from Florida to Texas should give it special consideration. — **C. W. Nussbaum, Nussbaum Electric Co., New Orleans, La.**

You Can't Escape Overhead

Exact knowledge of his operating costs is just about the most important asset of any electrical contractor

◆ An ominous prediction, but those who should know state that a year from today there will be fewer, perhaps only half as many, electrical contractors in business than there are at the present time.

This need not be true; but reluctantly, I believe the forecasters will not be far wrong.

During the lush years many contractors were moving too fast for their expenses to overtake them. Money was pouring in from every angle . . . and too few realized that nothing but the momentum was keeping them financially afloat. Then it was possible to pay Peter without obviously robbing Paul!

Meeting current expenses with a slow dollar is a far cry from doing so with fast dollars. During normal times overhead expenses, seemingly, increase. Actually, they are just more apparent. They were there all the time consuming dollars insidiously! During the rush they were overlooked!

Overhead baffles the average contractor. Unfortunately, overhead is partly made up of hidden factors. Can we flush them out in the open? I have tried to put a ferret in many of my contractor-friends' ears with no tangible results.

Honestly, I am of the opinion there is no contractor who can take his operation apart and examine each thread that's woven into the skein called overhead separately. As musicians say, one has to play by ear occasionally. You can call it intuition.

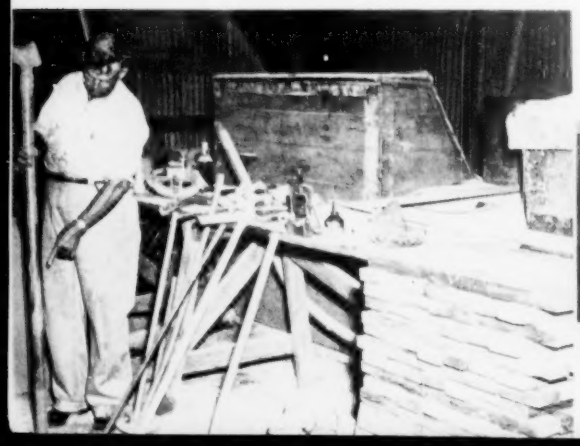
Arbitrarily, we can't state that our overhead amounts to, say, 20% . . . and tack an additional 20% on each job. Each job cannot absorb its proportional share of overhead. It is not quite that simple.

Perhaps, if we would but recognize gross profit for what it is, there would be less confused thinking. Gross profit doesn't exist outside of an accountant's break down. All you can do with gross profit is keep breaking it down until you arrive at net profit.

And even net profit is misleading!

We will say, for example, that our figures show that it costs us six cents a mile to operate our fleet of trucks. But that six cents per mile will not take into con-

These pipe benders have outlived their usefulness and now must be replaced. When a reserve is set up to buy new tools and equipment as needed, you are not easily misled by a false bank balance, thinking it represents net profit.



While this truck is out of service, the driver's time goes on. These eventualities must be taken into consideration, for they are going to happen.

by Harold Pfeiffer

President, Pfeiffer Electric Co.
LaPorte, Houston and Galveston, Texas

Harold Pfeiffer came to La Porte from Detroit, Mich., in 1915, with his brother, A. W. Pfeiffer. In 1921, they established their first electrical contracting business. But at that time Harold was working as a journeyman, commuting daily between La Porte and Houston. In 1930, Harold went actively into the business. Since then he and his brother have expanded their business and now maintain branches in Houston and Galveston. All this — and Harold is serving his second term as mayor of La Porte!

sideration the lost time involved in and out of service stations and garages.

Then from time to time we find that we have to buy a new truck! Where is this money coming from? Our bank balance represents the accumulation of net profit. Maybe we haven't made the net profit supposed!

If we are the astute business men we like to picture ourselves to be, we will have set aside, as a reserve, a certain percentage to buy new equipment and tools as needed. Setting aside this reserve prevents us from getting a false assumption of our net proceeds. If we don't, and we spend according to our supposed net profit, eventually our creditors are going to let it be known that we are their worry.

Without knowing exactly where you stand, there is no choice but to follow a working-to-go-broke routine. And while this is in progress, other contractors are going to be hurt. Some will be forced out of business.

Every contractor's bid is a reflection on his figures and his

(Continued on page 47)

Here is an example of more overhead. The handling of materials in-and-out involves costs that must be absorbed. Printed forms plus office help expense is involved in this phase of the operation.

Look at the overhead represented here: calendars, printed forms, office supplies, office equipment, adding machines, typewriters, billing machine — all this plus salaries.

Contractors and employees can benefit by learning *why* they do what they are doing

Why not teach the Code?

by E. C. Peele

Peele Electric Company
Burlington, N. C.

◆ THE NATIONAL Electrical Code is a lasting tribute to those who have given a reasonable minimum standard to a vast and complicated industry. It is my belief that no other branch of the construction industry has anything to compare with it. This standard is accepted throughout our nation.

Yet in spite of this there are not many electrical contractors who make it a practice to teach the Code to their employees. They must have some objection to this practice. Let us consider some of them.

Suppose we take one of our average contractors and ask of him "Why do you not teach your employees the Code?" His answer might be any of the following:

A. Because I do not know the Code myself.

B. I know the Code, but I don't know how to teach it.

C. I don't have time.

D. I had to learn the Code and all I know about the electrical wiring business myself. Let 'em learn it the hard way like I did.

E. If I teach them the Code they will soon feel too big for the job they have with me. They will stand a good chance of obtaining a license, and I will just be making competition for myself.

These statements seem to cover most of the objections anyone might have to teaching their employees the Code. Now let us try to overcome these objections.

A. Don't know—We should all have a good working knowledge of the Code. The Code is certainly an important part of the knowhow our industry has assembled. We owe it to our customers, to our employees, to the industry and to ourselves to get that working knowledge.

B. Don't know how to teach—To avoid repetition, we will combine the answer to this with statements made a little later.

C. Time—To each of us the wide world over, has been given the same amount of time—24 hours each day. One big difference between a successful and an unsuccessful man is the way in which he uses each of the 24 hours given him.

D. Let 'em get it the hard way—The ambitious employee will get it the hard way and the chances are that he will go his Own Way. Let us not forget the statement: "You can't keep a good man down." The employee who lacks ambition will not get it, and not having, cannot give.

E. Making competitors—As we have just said in regard to an ambitious employee, inactivity on our part will surely cause him to do something for himself. We cannot spend time and effort in helping an employee become a better worker without giving him the idea that we have an interest in him. By teaching him, his value to us will be increased. By helping him become worth more to us, he is worth more to himself. He will know that he is making progress and he will be better satisfied. He will be slower in seeking a change. A satisfied and ambitious employee is ambitious for his employer; he knows that he can succeed only in as much as his employer succeeds. Should an employee, with whom we have spent much time and effort in teaching, decide to strike out for himself, our efforts and friendliness will make of him

This article is adapted from a talk by Mr. Peele before the Electrical Institute meeting held in Raleigh recently. Mr. Peele is secretary of the N. C. Assn. of Electrical Contractors.

a better competitor. An informed competitor is a better competitor than one who is not informed.

We are all interested in our industry because it has given something to each of us. That something is an opportunity. It is our individual responsibility to make the most of that opportunity. We want honestly to improve our industry. The only way to improve it is to improve the parts which make it. Those parts are the individual people of the industry.

We can learn and teach, if we will. I am reminded of what is to me one of the hardest jobs existing. That is, selling insurance. I asked a good insurance salesman how he went about getting prospects and selling something as intangible as insurance. His motto was "I plan my work—I work my plan." That is a good motto for anything we might try to do. Let's apply it to learning and teaching. If we want to increase our knowledge or that of others, we must make a plan. We may think of a planning as something only architects or engineers do. I have done jobs, and I am sure many of you have also done them, from some marks made on a piece of scrap board. That was planning. We are always planning. It is not hard to set up a plan for Code study.

Take a very simple residential wiring job—one you are actually doing. If you don't do residential work, any small job will do. Break it down to all the sections of the code applying to it. Set down all the articles and paragraph numbers that apply to it, piece by piece. The service—the type of wiring for it—the main entrance switch—the branch circuits and rules applying to type of wiring used—outlet boxes—switches — receptacles — lamp holders—fixtures. You will be surprised how many articles and paragraphs you will list by covering the simplest job. By covering the rules for this simple job, you will have a good start.

Rules alone can be uninteresting. Find and give the reason for the rule—for each of them. The National Electrical Code Hand-

(Continued on page 45)

MODEL HOME FEATURES A-W

by W. G. Nourse

Supervisor of Sales Planning
New Orleans Public Service, Inc.

◆ ELECTRICAL LIVING got its share of publicity in New Orleans' 1950 Home Show through a model house in the framing stage but completely outfitted with model kitchen appliances, actual wired circuits and miniature lighting fixtures.

The table-top model home is only 10½ feet long and 5½ feet wide, but when measured in terms of comfort, efficiency and livability, it is larger than many life-size homes. Displayed by New Orleans Public Service, Inc., the model home presented the "5 Steps to Better Living" to the more than 120,000 persons attending the gigantic New Orleans Home Show. The "5 Steps" included a planned kitchen, comfort cooling, certified adequate wiring, complete light conditioning, and automatic water heating and laundry.

To show the advantages of certified adequate wiring, the house was actually wired with nine circuits, easily traced through the house because each circuit was of a different colored wire, and because construction of the model was halted at the stage where the wiring would ordinarily be installed in a home.

Eight of the circuits were labeled as 120 volts with one 220 volt circuit supplying a miniature attic fan, centrally located for invigorating comfort cooling. A small plastic electric meter and a circuit breaker panel showing provisions for two spare circuits completed the wiring installation.

From the planned kitchen with its model appliances made to exact scale, a prospective home builder could easily see the advantages of a **complete** kitchen planned for beauty and efficiency.

Valance and cove lighting added beauty to the home, and the model lighting system was accomplished by using neon tubing to simulate fluorescent lighting and small low-voltage bulbs for incandescent. A light was placed over each work area in the kitchen and laundry, and as an added feature of the complete light conditioning, the lighting in each room was supplied from two separate circuits. If one circuit became overloaded and went out of service, the lighting supplied by the other circuit could still be used.

With a properly sized automatic water heater, the automatic washer in the laundry would have plenty of really hot water, and with a dryer to eliminate much of wash day's drudgery, the homemaker would soon grow to love the part of her home.

Seven Times More Light for Nashville Schools

By Sam B. LeCornu

Nashville Electric Service
Nashville, Tenn.

◆ CLASSROOM MODERNIZATION in Nashville city schools has raised lighting levels from 5 foot-candles to 35-foot-candles.

Lighting conditions were improved in conventional, but outmoded, schoolrooms. This great improvement was accomplished with standard commercial fluorescent fixtures, each containing two 40 watt, 3500°, white fluorescent lamps.

In addition, all blackboards, which reflected scarcely any light, were refinished with a light green paint. The dark walls and ceilings were repainted in colors which reflect the maximum amount of light back into the room.

To balance the daylight coming in through the windows in all rooms exceeding 20 feet in width, it was recommended that the row near the windows, or exposed wall, be set in 2 feet, to increase the over-all level of light in the room. The light from the outside, even on an overcast day, will make up for the 2 feet allowed on irregular spacing. The fixtures were suspended to a level of 10 feet above the floor. The ceiling height in most rooms was 12 feet. It was recommended that the spacing of the continuous rows should not exceed 10 feet, since with 10 feet spacing the light is nearly perfect in uniformity.

The school authorities agreed to install and pay for fixtures to be installed for inspection in as many classrooms as the jobbers wished to furnish. There were 12 - 15 classrooms relighted with 2 light, 40 watt, louvre shielded fixtures, with approximately 60% of the light downward and 40% upward.

The business offices of the city schools, also the School Board's office, are located in Hume-Fogg Technical and Vocational High School. They were relighted with the first classrooms, which we think was helpful. This was the school where all of the experimental testing and checking was made. Hume-Fogg was the first and only high school in Nashville until 1932. The building had suf-

This classroom of East Nashville High School, Nashville, Tenn., is typical of the relighting program just completed. An interesting feature of the installation is the fact that lighting engineers are able to maintain an illumination level of 35 foot-candles from a two-row installation that would normally deliver only 30 foot-candles. This was accomplished by placing the row of lamps on the window side two feet nearer the center of the room, thus utilizing some daylight. More than 7,000 of the Gibson Biltmore 3500 fluorescent fixtures shown here were used in the modernization program.

ficient wire capacity for a complete relighting job with fluorescent lights, without having to install any additional circuits. The West wing of the building was completed in 1910 and the East wing in 1918. All rooms had two circuits, and No. 12 gauge wire was used for all branch circuits.

It was a pleasure for the Nashville Electric Service to work on such a program. The Director of School House Planning was furnished with two blueprints showing the spacing for all fixtures for classrooms, library, offices, etc., and the total number of fixtures required for each school was specified. The fixtures for most of the schools were ordered shipped directly to the school in which they were to be installed.

The average classroom was 20 to 22 feet wide, by 28 to 30 feet long, with some few rooms being 32-feet long. We checked two of the first classrooms relighted after one full year's service. The fixtures have not been cleaned, and only the lamps which burned out, if any, have been replaced. The foot-candle average was above 30. The complete relighting job was done by the school board's own staff of workmen, supplemented by some of the shop men from Hume-Fogg's Electrical Department.

In all classrooms where no additional circuits were required, the 12 to 14 fixtures in most rooms could be installed by two men in an 8-hour day. They really got going about June 15, 1949, when school was out, and the job was 90% complete by January 1, 1950.

Average Cost $224 Room

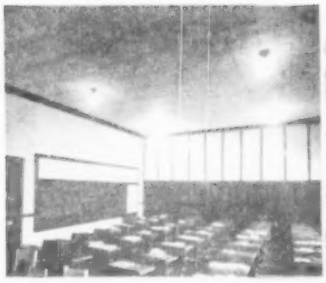
The average cost for the more than 800 rooms was $224 per room. Other improvements: the 50 to 100 fluorescent fixtures previously installed with some of the better enclosing glass units were used to brighten up the corridors, lunchrooms, and other dark, poorly lighted, areas.

The county school system has a separate management, and there are about as many school buildings to be relighted in the county as there were in the city system. They are now progressing on their relighting.

Nashville's School Lighting Specifications

1. Fixtures shall be two-lamp 40-watt louvered bottom type, designed for continuous mounting, or may be a combination of four (4) ft. two-lamp units and eight (8) ft. four-lamp units.
2. Units shall be of the direct-indirect type and so designed that approximately sixty (60%) per cent of the total light output is downward. The overall efficiency shall not be less than eighty (80%) per cent of the bare lamps.
3. Louvres shall be constructed so as to cut off the view of lamps from not less than 30° below the horizontal and at right angles to the lamps, and not less than 30° when viewing fixtures lengthwise to the lamps. The louvres shall be of substantial construction and easily removable for cleaning and servicing.
4. The brightness of side panels, louvres, supporting bars, and all other fixture surfaces visible in normal viewing angles shall not exceed 2.4 candles per square inch.
5. Fixtures shall be constructed of sheet metal. If steel is used, it shall be bonderized and finished in baked enamel or equally durable finish. If anodized aluminum is used, it shall be semi-specular or diffusing. All sheet finished.
6. Sides of fixtures may be metal or plastic. If plastic is used, it shall be diffusing Polystyrene and guaranteed by the fixture manufacturer for life of the fixture against discoloration, cracking, or buckling. It shall be rigid and supported so it will not fall out with normal shrinkage.
7. Brightness requirements, shielding angles, and over-all efficiency as referred to in paragraphs 2, 3 and 4 above shall be confirmed with The Electrical Testing Laboratories photometric data report.
8. The ballasts shall be Tuttle HPF, 118 volt, 60 cycle with compensator approved by the Electrical Testing Laboratories.
9. The preheat starting switches shall be the replaceable manual reset glow type, approved by The Electrical Testing Laboratories.
10. Lampholders shall be 671, approved.
11. Fixture wire shall be no smaller than No. 18 AE and shall be held in position within the wiring channel.
12. All hangers shall be single stem of design which will permit easy installation and secure mounting of fixtures. Hangers shall be a maximum of 18" nipple for 12" ceiling heights and 36" for 14' ceiling heights. Installations in several will be two (2) rows of six (6) fixtures each per classroom requiring one additional hanger per row, to 400 additional hangers with the first 2,400 fixtures to be purchased. These additional hangers shall not be included in base bid for fixture with one hanger, but shall be figured as a separate item based upon unit price established by proposal.
13. Fixtures shall bear Underwriters Laboratories seal of approval.
14. Fluorescent lamps shall be F40-T12-W as manufactured by The General Electric Company, or approved equal.
15. All fixtures and accessories shall be guaranteed for a period of one year against defective materials or workmanship.

Before — After



Relay Department

By E. H. Farley

Until recent years the electrical power supply industry was made up of a number of small isolated systems, and frequent interruptions in service were accepted by customers as a necessary evil. However, as the use of electricity has increased, the customers have become more dependent upon it as a part of their existence. This has caused the expansion of the isolated systems and required that they be interconnected in order to furnish service with the lowest possible number of interruptions. This growth has changed protective relaying from a simple application to a technique which takes the ingenuity of some of our most skilled engineers.

◆ For Relay Department activities, the operating area of the Virginia Electric and Power Company is divided into two parts—the western area and the eastern area. Roughly, the western area comprises the former Virginia Public Service Company and the eastern area comprises the former Virginia Electric and Power Company before these two companies merged in 1944.

The personnel of the Relay Department consists of seventeen men and the part-time services of two stenographers. The System Drafting Department also helps in the final tracing of any prints to be made up for permanent records.

The relay engineer has general supervision of the Relay Department and all its work. He has one office assistant and reports to the system supervisor of electrical equipment and transmission—a section of the System Operating Department.

In each of the two areas, there is one assistant relay engineer who reports to the relay engineer and who is in charge of all installation and maintenance testing of relay and control equipment in his area. Each assistant relay engineer has two relay test crews consisting of an experienced relay tester and a test helper in each crew. Also reporting to the assistant relay engineers are five engineering assistants—two

This article was adapted from a paper presented by Mr. Farley at a Conference on Protective Relaying held at Georgia Institute of Technology, in co-operation with the Southeastern Electric Exchange and AIEE.

Organization

Assistant Relay Engineer
Virginia Electric and Power Company

for the western area and three for the eastern area. One test crew has headquarters in Charlottesville, and the rest of the personnel work out of Richmond.

System Relay Office

The relay engineer's office, which he shares with his assistant, is located in the main general office building.

All requisitions for the purchase of control and protective equipment in the entire system come to his desk for approval, whether written by district or system office personnel.

All one-line diagrams of stations and wiring diagrams of control and protective equipment, including those made up by manufacturers for equipment delivered wired, those made up by contractors for work done by them, and those made up by the company must be approved by him before the actual work commences.

In many instances he originates requisitions for protective equipment and designs elementary schemes to be followed. He works closely with system planners in connection with system load studies and with plans for enlarging and strengthening the system where needed.

Difficult fusing problems and requests for information on expected fault currents and interrupting requirements at various locations on the system usually come to his desk. He and his assistant accomplish much of the work; much of it is passed on to the assistant relay engineers for their information or processing. Also, if the assistant relay engineers get too badly "snowed under" with work, he lends a most helpful hand.

Aside from his Relay Department duties, the relay engineer also has general supervision over the Communications Department which is headed by an engineer, with two test crews of two men each. Their duties cover the installation and maintenance testing of carrier equipment used for communication and that used for relaying.

At present they are also installing a two-way frequency-modulated radio system in one of the more thinly-populated districts, for communication between two fixed stations and any one of several mobile units mounted on service trucks in the district. This is the first of several such installations to be made in the near future.

Area Relay Offices

The two Assistant Relay Engineers are housed together, sharing the same office and relay shop. The office space for their engineering assistants and themselves is, temporarily, one end of a large undivided room located across the street from the main general office building. The other end of this room is office space mainly for the System Meter Department and the Communications Department.

For office equipment they have seven desks with chairs, two tables, two Kardex files for separate relay and test data for each area, six filing cabinets—three for each area—in which are kept wiring diagrams, field sketches and notes by stations, manufacturers' information, purchase orders, correspondence and miscellaneous papers. The two bookcases contain catalogs, text books, loose leaf binders containing relay calculations, one-line diagrams of stations, and some office supplies.

Next door to the area relay office is the relay shop containing two desks, chairs, clothing lockers, a work bench equipped with drawers and an elevated shelf along its middle, drill press, emery wheel, small vise, a few special tools and instruments. Also included is 750 feet of shelf space for storage of relays, relay removal parts, and switchboard accessories.

We attempt to supply the system with such things as indicating lights, terminal blocks and fuse blocks from our supplies in

(Continued on page 42)

The System

The area one served by Virginia Electric and Power Company comprises approximately 22,000 square miles in the states of Virginia, West Virginia and North Carolina.

Power for the Vepco electric system is generated in five steam stations and seventeen hydro stations with a combined capacity of approximately 790,000 KW of which approximately 45,000 KW is hydro power. In addition, there is installed 9140 KW of diesel generating capacity. All generation stations are interconnected by high voltage transmission lines and ten interconnections are maintained with neighboring power companies.

Electric service is provided for approximately 430,000 customers in about 1100 communities with a total population of nearly 2,000,000. The maximum integrated one-hour net peak load to date is 624,000 KW.

To reach these customers, there are 1,307 miles of lines operated from 66 KV to 132 KV, and about 20,000 miles operated at 44 KV or below. There are 1,400 breakers equipped with protective relays and 66 customer-owned interconnection breakers on which the company maintains the relay settings.

1

Organization and Orderliness

◆ WHAT MAKES an electrical contracting organization successful? There are many factors that enter into such a business, and it is no simple matter to pick out a single phase of operation and say, "This is it."

In the case of Dixie Electric Co., of Montgomery, one of Alabama's most successful contractor-dealer operations, however,

2

3

4

1

The store front carries punch. The name Dixie Electric is well known in Montgomery.

2

Completeness is a prevailing characteristic in the firm's operations. This view of the interior display with its wide range of merchandise is typical. With its service department and construction department, Dixie Electric is in a position to advertise that they can supply any electrical need.

3

Another view of the display floor. Bill Beasley, retail store manager, is bringing floor display records up to date.

4

Lighting fixtures are displayed throughout the retail store . . . even in the offices. In this photo are H. B. Posey, office manager, and Ruth Reddoch, assistant office manager.

an examination of the random views of these pages indicates that organization and orderliness is certainly everywhere apparent and must have been a contributing factor in the successful operations of this firm over a period of 40 years.

The business is headed now by J. Noble Crump, but it was founded by his father.

"We have always operated a retail store and a good service department," Mr. Crump reports, "and we have made electrical installations of all types even when our electricians made their calls in a horse and wagon."

Undoubtedly, the rendering of *complete* electrical service has played its part in establishing the favorable reputation of Dixie Electric. There's no side-stepping the service responsibility by this firm which is set up to handle 50 or more service calls a day as regular routine.

5

6

7

8

5

Frank Jehle, secretary and treasurer of the company, is in charge of all construction and maintenance. Lonnie McGarr, left, and Billy Turner, right, service men, work out a route on the calls in their areas.

6

Recognizing that their service trucks are mobile advertisements for the company, Dixie's management keeps them representative of the firm's standing.

7

Nowhere in an electrical contracting organization does neatness and orderliness pay off so well as in the warehouse. There's no difficulty here locating the materials needed, and loading overhead is thus reduced.

8

J. Noble Crump, center, is president and active head of Dixie Electric. At left is Frank Jehle, in charge of service and construction, and at right is J. E. Van Hoose, in charge of engineering and estimating.

MODERN METHODS

Improved devices, labor saving tools, short cuts, new ideas in electrical construction.

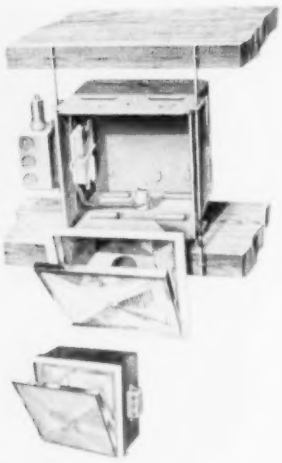
Labor Saving Recessed Unit

♦ A NEW TYPE of incandescent fixture features innovations that should bring about substantial reductions in installation costs. The new fixture (made by Kirlin Co., 3435 E. Jefferson Ave., Detroit, Mich.) does not require the minimum of four feet of asbestos wire called for by paragraph 4179 of the National Electrical Code, and this fact is pointed out on the Underwriters' Laboratories label on the fixture.

An insulated junction box on the side of the recessed fixture keeps the heat below 60 degree C.—the limit for rubber covered wire—even under the worst possible conditions. Thus it is permissible to run rubber covered wire directly to the fixture. Underwriters' Laboratories have approved the new feature for ordinary construction and does not limit it to fire-resistant buildings.

In the past, the Code has required that all recessed incandescent fixtures be wired with 4 feet of asbestos covered wire in greenfield to a junction box placed at least 1 foot from the fixture above the ceiling. This has been troublesome for the contractor, as few carry asbestos wire in stock and none like the idea of placing a junction box where it is accessible only by removing the recessed fixture box.

Another feature of this new fixture is the ease of mounting provided by mounting ears and bar hangers. As shown in the illustration, the bar hangers may be stapled directly to the joists. The manufacturer packs the fixtures individually, each package containing a junction box, bar hangers, wire-connectors, and staples.

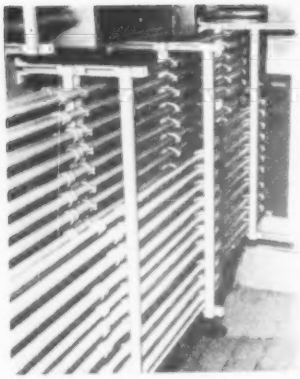


By utilizing an insulating cover for the junction box at the left, the manufacturer of this recessed type fixture has UL approval for connecting rubber covered wires in the junction box. The bar hangers reduce installation labor.

Versatile Framing For Conduit Support

♦ AN INTERESTING installation in which a patented metal framing was employed to support heavy rows of conduit brought to light several advantages this structural system provides over ordinary conduit racking methods.

Being completely adjustable, the metal framing (made by Unistrut Products Co., Chicago) permitted fast framing assembly, where supporting members could be added as the work progressed. In an installation of this type, stock lengths of channel are cut to correct measurement right on the job and quickly assembled by means of fittings, bolts and the spring nuts which slide in the channel to exact point where another framing member is desired. When bolt is turned tight, positive clamping action results, and members are secured firmly to one another.



Unistrut metal framing for racking conduit made it possible to add supporting members as the work progressed and reduced detailing when the job was being designed.

Such flexibility provides a means of easy adjustment in the event of later changes or additions in the distribution system by the mere loosening of the bolts involved. Another distinct advantage which pays off in considerable savings is the reduction in detailing time when the job is being engineered.

Marking and Cutting Ceiling Outlets

by Sidney Meilleur

Foreman, Busy Electric Co.
New Orleans, La.

♦ A MINOR PROBLEM magnified many times can really amount to quite a big problem. In connection with the electrical installations in the new California Company Building being constructed here in New Orleans, we have run into the usual problems encountered when the newer types of building materials must be worked in or harmonized with both the old and the new in electrical material.

The ceilings in this new building consist of perforated metal squares or tiles lined with a pad of acoustic fiber. As is customary,

we install our conduits and then do nothing further until the ceiling gang has completed the installation of these acoustic metal squares. On other jobs previous to this one the ceiling crew did the work of cutting in the electrical outlets for us. These outlets were cut out with a pair of tin snips. On this job, we had to face the problem of doing it ourselves and doing it in a way to save as much time as possible. Part of our plan isn't new, part of it is new and therefore it might prove useful to other electrical contractors.

Due to the tiles being pre-finished in white, we could not measure and mark out the outlets in pencil on the tiles themselves. Instead, we marked out the pattern on the floor below and then, with a plumb line, located the position for the outlet on the ceiling above. Then we snapped-out the marked tile and placed it on a bench. From here on is where we think we saved valuable time. Instead of using snips to cut these outlets we used a disc cutter (Jiffy cutter) attached to a standard electric drill. Although the discs packed up into the cutter, they were easily removed with a hooked wire inserted into the perforations. When we considered the approximately 10,000 outlets we had to make, we believe our method was quite superior to the snip method used by former ceiling crews. Furthermore, by placing the metal tile on a wood block, we did not bend it or distort it in any way, or mar the finish.

Another problem of secondary importance was the extra consideration required in the placing of the outlet and the fixture-suspension so that, when the fixture was hung, it would be centered symmetrically among a group of the ceiling squares. As most of the fixtures were the long (4-foot) fluorescent type, this problem proved rather knotty at times.

Dial Type Switch For Home Lighting

◆ A COMPLETE package of dial-controlled lighting — including four-way switches, wiring, and fixtures — has just been made available to give electrical contractors a potent selling point in bidding up residential wiring and lighting jobs. This package, called "Lightronic Lighting," (manufactured by Lightolier, Inc., New York City, N. Y.) offers contractors the opportunity of selling a truly modern lighting installation for every room in the house.

One of the few postwar dreams that actually materialized, "Lightronic Lighting" controls the quantity and quality of light for an entire room from a single dial-switch. All Lightolier fixtures, including such designs as Decorative, Advance, Pacemaker, and Lytron for kitchen and bath may be used simply by installing in the wall a three-way wire cable leading to the dial-switch. Thus by turning the knob, three forms of lighting effects ranging from spotlighting to general room illumination are made available.

There are many types of installations made possible for every type room with this equipment. In the bedroom, for instance, the single switch located near the door or the bed permits selective control of a bedreading lamp, an indirect uplight for night-lighting, and over-all room lighting.

In the kitchen, three forms of the dial direct light to the stove, to the refrigerator, or to all-encompassing room lighting. In the bath, the knob controls a choice of shaving light, indirect lighting, or general light.

The same principle is equally effective in a dining room, living room, or any other room in the house. The three types of lighting for each room are a matter of personal preference.

Typical of the flexible home lighting made possible by the dial type switch is this dining room installation. The three points of the dial switch (see insert at upper right) successively provide a spotlight down on the table, indirect lighting, or a combination of both for complete room illumination.

CODE DISCUSSION

Official Code Interpretations

Interpretation No. 355
Issued May 8, 1950

Table 1—Section 2403

Question 1: Is it the intention of the Code that Table 1 permits six 115 volt branch lighting circuits derived from a 3-phase, 4-wire supply and comprising a total of eight No. 12 conductors to be run in a single conduit?

Answer: Yes.

Question 2: In view of the reduced allowable current specified in Table 1 (Note 4) for the conductors installed in this single conduit, may single pole nonadjustable circuit breakers, rated 20 amperes, be chosen as the overcurrent protection specified in paragraph b, section 2403 of the Code?

Answer: Yes.

Interpretation No. 356
Issued May 24, 1950

Section 2403

Question: Is it the intent of the National Electrical Code, 1947-9 edition, that the exceptions allowed in paragraphs a, b, and c of section 2403 be likewise accepted when there are available appliances (fuses or circuit breakers) with standard ratings corresponding to those of Table 1 for the conductors under consideration?

Answer: No.

Interpretation No. 351
Issued May 5, 1950

Section 4003

Statement: An "Electric dryer" (domestic laundry type) rated 4600 watts, 115-230 volts, includes heating units at 230 volts, also a timer, a fractional horsepower motor and inside lighting fixtures at 115 volts. Its weight (235 pounds) and dimensions (36x31x27 inches) allow it to be moved readily. Servicing cleaning, etc., make it desirable to provide a flexible or detachable supply connection. An owner may wish to continue its use if moving to a "new home." No fixed plumbing for water supply or discharge is involved.

Question: May such an appliance be supplied from a suitable branch circuit (three-wire) in accordance with section 4003 (3) and the definition (Article 100) of a portable appliance?

Answer: Yes.

Interpretation No. 353
Issued May 24, 1950

Section 2351-a; Section 2371-a-3

Question: What is the intent of the limit of "six" specified as to disconnecting means, section 2351-a and overcurrent protection, section 2371-a-3, of the 1949 edition of the National Electrical Code?

Answer: To accomplish complete control and interruption of current supplied through a given set of service entrance conductors.

Interpretation No. 354
Issued May 24, 1950

Section 3709

Question: Does paragraph b of section 3709 recognize the use of extension ring with a standard outlet box in order to secure additional capacity within the box assembly for a larger number of conductors than is specified in paragraph a for the corresponding trade-size box?

Answer: Yes.

Interpretation No. 357
Issued June 23, 1950

Section 2116-2203-b. Show Window Lighting.

Question: Was the relief provided in the case of show windows in small stores and served from lighting branch circuits permitting acceptance of the one and one-half ampere rating for outlets provided for show window lighting in contrast to the formerly recognized factor of 200 watts per linear foot intentional.

Answer: Yes, assuming that the provisions of section 2203-b are taken into account in computing feeder loads.

News of the IAEI

Southern Section to Meet in Florida

◆ PLANS are progressing rapidly for the annual meeting of the Southern Section, IAEI, to be held in the Sheraton Plaza Hotel, Daytona Beach Florida, October 16 - 18.

The business portion of the program will include a number of talks on subjects of timely interest to electrical inspectors as well as a number of sessions devoted to questions and answers on the Code.

A special feature of the meeting will be the manufacturers' displays which will feature a number of new products and materials. A total of 32 display booths will be available and reservations should be forwarded to Walter Stall, chairman of the Exhibits Committee, Main and Orange Sts., Jacksonville, Fla.

The entertainment program will include opportunities to enjoy the special features of this Florida City. Activities include fishing, lawn bowling, tennis, golf, and 23 miles of beaches.

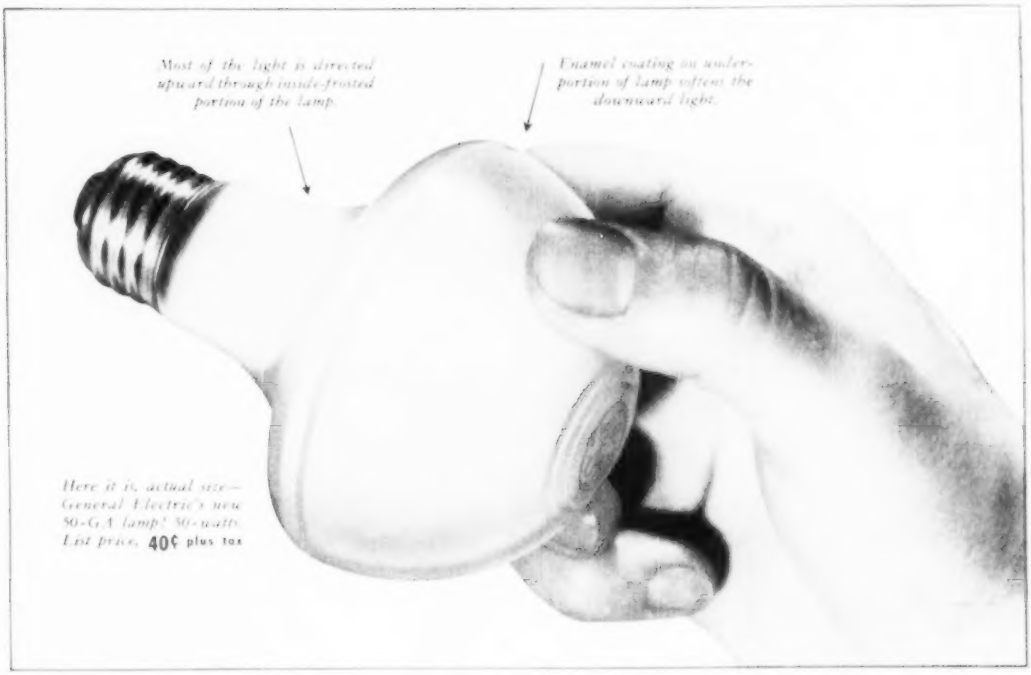
General chairman of the 1950 annual meeting is George Cash, P. O. Box 3534, Daytona Beach.

Membership of Code Panels

◆ MEMBERSHIP of Code Panels of the Southern Section for 1950 will remain the same as appointed for 1949, according to recent announcement by A. M. Miller, secretary-treasurer.

Joint Chapter Meeting Scheduled

◆ A JOINT meeting of the Florida and Georgia Chapters, of IAEI, will be held sometime during the 2-day meeting of the Southern Section, in Daytona Beach. The meeting will be held at the Sheraton Plaza and exact time will be announced later.



A market of 100,000,000 sockets for this new kind of lamp!

New General Electric 50-GA lamp is specially designed for fixtures like these . . .

HERE'S a new General Electric lamp bulb to meet the needs of the hundreds of customers in your neighborhood who have ceiling fixtures like those shown here. It's the new 50-GA lamp—specifically designed for overhead lighting fixtures where bare lamps in base-up position are now used. This new lamp bulb adds beauty to chandeliers and fixtures, gives a charming, indirect-lighting effect, softens the light to flatter home furnishings.

The secret lies in a revolutionary new shape that directs most of the light upward, plus an enamel coating on the lower part of the lamp which gives the downward light added softness and warmth.

Surveys indicate that American homes have more than 100,000,000 sockets which need 50-GA lamp bulbs. And since customers buy six or eight 50-GA lamps at a time to fill an entire chandelier, your agents make a high unit sale. Get your share of this big market by reminding General Electric lamp agents to feature 50-GA lamps prominently. Now available in 50-watt size at 40¢ plus tax.

GENERAL ELECTRIC

INDUSTRY NEWS

Timely items relating to contractors, light and power companies, electrical wholesalers, electrical manufacturers and their agents.

Westinghouse Builds Birmingham Plant

◆ Because of the increasing industrial importance of the South—and especially the Birmingham region—the Westinghouse Electric Corporation will build a new plant in Birmingham, Ala.

O. O. Rae, Southeastern District manager for the company, said the new plant will be operated by the Westinghouse Manufacturing and Repair Department. It will provide extensive overhaul and repair facilities to serve customers in all parts of Alabama.

A site already has been secured for the new plant. A tract of land 400 feet long and 300 feet deep has been purchased on Third Avenue South between 33rd and 34th Streets, about one mile east of downtown Birmingham. The location is on a siding of the Southern Railroad, and on the main highway route to Atlanta.

Construction will begin immediately on the new plant, which will consist of two one-story brick and steel buildings having a total of approximately 50,000 square feet of floor space. The buildings will be completed by June, 1951.

Sutton Elected EEI President

◆ The new president of the Edison Electric Institute, Louis V. Sutton, was elected at the Institute's 18th Annual Convention held recently. Mr. Sutton, president and general manager of the Carolina Power and Light Co., Raleigh, N. C., succeeds retiring president Elmer L. Lindseth, president of The Cleveland Electric Illuminating Co., Cleveland, Ohio.

Louis V. Sutton

Mr. Sutton's past service with the Edison Electric Institute includes duty as a member of the board of directors, and, since last June, as the organization's vice-president.

Born in Richmond, Va., in 1889, Mr. Sutton was graduated from Virginia Polytechnic Institute in 1910 with the degree of B. S. in Electrical Engineering. After graduation, Mr. Sutton served two years with the General Electric Company as a member of its engineering test course. In 1912, he joined the Carolina Power and Light Co., the organization he now heads. Beginning as a statistician, he successively became assistant engineer, division manager, commercial manager, and assistant to the general manager.

In 1924, he accepted the position of assistant general manager with the Arkansas Central Power Co. Later he moved to Jackson, Miss., where he helped organize the Mississippi Power & Light Co., becoming vice-president, general manager, and a director of that organization.

Mr. Sutton returned to Raleigh in 1933 to become president and general manager of the Carolina Power and Light Co.

MSA Names New Officers

◆ New 1950-1951 officers were elected recently at the annual convention held in Boston of the National Industrial Service Association, Inc.

Elected unanimously were the following officers: president, H. E. Grant, Tennessee Electric Motor Service, Nashville, Tenn.; vice-president, Joseph F. Ferrari, Excel Electric Service Co., Chicago, Ill.; secretary, M. F. Zack, Zack Brothers Electric Co., Mason City, Iowa; and treasurer, C. R. Durand, H. N. Crowder, Jr., Co., Allentown, Pa.

Directors-at-large elected were H. E. Grant, Al Elson, Jr., New England Machine and Electric Co., Pawtucket, R. I., and Fred W. Kiemle, The Fred W. Kiemle Co., Toledo, Ohio.

Recently elected directors of several regions also took office, including the new director of Region 5, H. A. Lilly, Tampa Armature Works, Tampa, Fla.

Birmingham Company to Join Southern Firm

◆ The Birmingham Electric Company soon will become a part of the Southern Company family, according to a recent announcement made by E. A. Yates, chairman of the board of the Southern Co., and George C. Walker, president of Electric Bond and Share Co.

The companies have agreed, subject to all necessary governmental approvals, upon a program looking to the integrated operation under common ownership of the electric systems of Alabama Power Company and the Birmingham utility.

Southern already is a holding company for the Georgia, Alabama, Gulf, and Mississippi Power Companies.

Under the plan, Mr. Yates said, Southern will make application to the Securities and Exchange Commission for approval of an offer to the Birmingham Electric common stockholders to exchange shares of Southern Company common stock for Birmingham Electric common stock. The rate will be at 1½ shares of Southern for each share of the

"I'm clinching rush panelboard jobs with my own basic supply of *Pushmatic** Electri-Centers!"

1 "I took a tip recently from my local BullDog Distributor and started an emergency Pushmatic stock with several basic Electri-Centers and fronts plus . . .

2 "a few cartons of Pushmatics (they're all the same size, regardless of ratings or types, and fit any Electri-Center, so you don't need too many).

3 "With this supply, I was ready for that rush order yesterday. All I had to do was hook the right Pushmatics on the mounting rib and connect them to bus bars with a screw driver.

4 "Now I'm always sure of having the right equipment on hand and being factory-to-job-site in a rush order comes in. My customers appreciate that fast service, too."

This timesaving plan is paying off every day for Contractors across the country.

Revolutionary Pushmatics are interchangeable for rating and type. And there's a Pushmatic to meet every load condition: THERMAL-MAGNETIC and THERMAL-MAGNETIC with exclusive AMBIENT COMPENSATING FEATURES. Both are nontoxic, [illegible] and resistant, in ratings of 15, 20, 30, 40 and 50 amperes, 1 pole, 120 V., or 2 poles, 120-240 V., AC.

See your local BullDog Distributor today. He'll be glad to show you how a small emergency supply of flexible Pushmatic Electri-Centers can help you clinch rush panelboard jobs.

Features of sensational Pushmatics!

- Simple to install; plenty of wiring room
- Individual single-pole units . . . easier to add or interchange than multiple units
- Push-button switching
- Positive protection against overloads and short circuits
- Trip-free automatic protection

Approved by Underwriters' Laboratories

BULLDOG ELECTRIC PRODUCTS COMPANY
DETROIT 32, MICHIGAN • FIELD OFFICES IN ALL PRINCIPAL CITIES
IN CANADA: BULLDOG ELECTRIC PRODUCTS OF CANADA, LTD., TORONTO

PUSH—It's ON!
PUSH—It's OFF!
PUSH—It's ON again!

*Push-button switch with automatic protection for electric circuits

BULLDOG

HEADQUARTERS FOR ELECTRICAL DISTRIBUTION

other firm's common stock.

Subject to SEC approval, Bond and Share, which owns 254,045 shares, or 46.6 per cent of the outstanding Birmingham Electric common, has agreed to accept the Southern exchange offer.

The plan provides that an offer is also to be made to the holders of Birmingham Electric 4.20 preferred stock to exchange that stock, share for share, for the 4.20 preferred stock of Alabama Power. If the exchange is put through, it is contemplated that the electric properties of Birmingham Electric will eventually be acquired by Alabama Power.

It is also a part of the plan that the transportation properties of Birmingham Electric will be sold to nonaffiliated interests. This is a SEC provision under the Public Utilities Holding Company Act.

DAWES & COMPANY EXPANDS ACTIVITIES — The firm of Edgar E. Dawes & Company, with headquarters in Atlanta, is continuing to expand its sales activities by locating resident salesmen at strategic points in its territory. Two Atlanta men now cover South Carolina and Georgia; a man in Birmingham covers the Alabama and East Tennessee territory; and the state of Florida is covered by a Tampa man. Front row, left to right, are Nan Conley, secretary; Mr. Dawes; and Margaret Paul. Back row, left to right, are Don White, Birmingham; Bill Bishop, Atlanta; and O. C. (Puck) Puckett, Tampa. Among the manufacturers represented by the Dawes agency are Steel City Electric Co., Spang-Chalfant Div. of National Supply Co., Crescent Insulated Wire and Cable Co., and Wagner Malleable Products Co.

Sales Department Changes Announced

◆ ESTABLISHMENT OF separate advertising and market development divisions in the general sales department of American Steel & Wire Company has been announced by Wilmer H. Cordes, general staff manager of that department.

Appointed as manager of the advertising division was O. B. Stauffer, and as manager of the market development division was John E. McGrath. Both appointments are now in effect.

Mr. Stauffer has been associated with the American Steel & Wire Company since 1944, for three years as assistant manager of the market development and advertising division.

Mr. McGrath has been associated with the company since July, 1946, serving in various sales promotion and market development assignments.

Lastinger Heads Georgia Utility

◆ THE BOARD of directors of Georgia Power and Light company have announced the election of John W. Lastinger as president. He succeeds J. F. Bailey who has resigned. Lastinger is a former vice-president and has been with the Georgia utility since 1926.

C. W. Warner, former general superintendent of the company was also named a vice-president and director. Both men will continue to make their headquarters at Valdosta, Georgia.

John W. Lastinger

Georgia Power and Light company is a wholly-owned subsidiary of Florida Power Corp.

Lighting Promotion Plans Surveyed

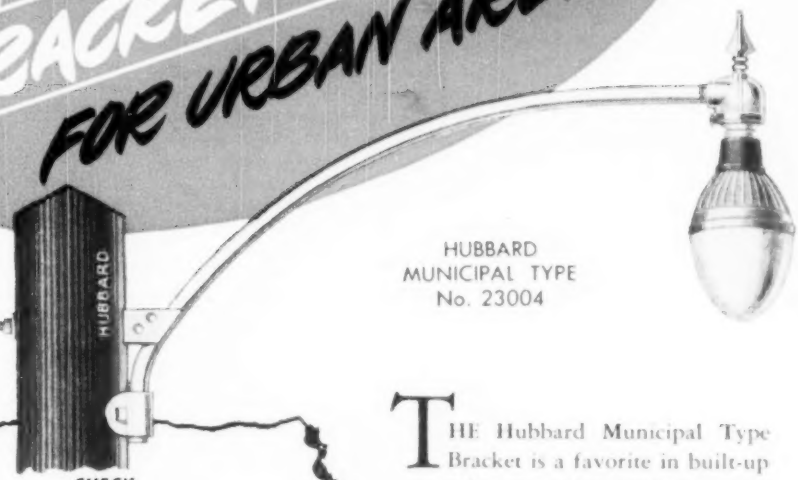
◆ SEVENTY-NINE electric companies, representing 93 per cent of those replying to a survey made by the National Promotion Committee of the Planned Lighting Program, will conduct lighting sales programs during the latter part of 1950, Joseph S. Schuchert, chairman of the committee, has announced.

Of these companies, 96 per cent will stress commercial lighting promotion; 82 per cent will include promotion of home lighting; 90 per cent, industrial lighting; 73 per cent, farm lighting.

Every company replying to the survey enthusiastically endorsed the concept of Planned Lighting, and the emphasis on the use of individually prepared plans in promotion of all types of lighting installations. A total of 91 per cent of replying companies will use Planned Lighting Program materials in their sales efforts, Mr. Schuchert declared.

"These results of the survey show widespread appreciation of the value of lighting load to utility revenues, and of the continuing need for intense promotion in all lighting markets," Mr. Schuchert explained. "Equally significant is the 100 per cent endorse-

THE MOST POPULAR BRACKET DESIGN FOR URBAN AREAS



HUBBARD
MUNICIPAL TYPE
No. 23004

CHECK THESE ADVANTAGES

- ✓ All welded construction throughout
- ✓ Requires small pole mounting space
- ✓ Meets all EEI-NEMA lighting specifications
- ✓ "Keyhole," basic feature of pole attachment, permits installation by one man
- ✓ Simplicity of design means low cost
- ✓ Permanently aligned at factory
- ✓ "Free flowing" internal wiring—no sharp bends and no obstructions—wiring pushes through with a minimum of resistance

THE Hubbard Municipal Type Bracket is a favorite in built-up areas because of its pleasing appearance and adaptability. The bracket is internally wired and adaptable to either internally or externally wired systems. It may be installed close to the top of the pole for maximum elevation. It is easily installed by one man, comes in nominal lengths of 3, 4, 5, and 6 feet, with rises from 16 to 26 inches.

Write for Literature

HUBBARD AND COMPANY

PITTSBURGH • CHICAGO • OAKLAND, CALIFORNIA

"Hang the Load on Hubbard Hardware!"

ment of the Planned Lighting idea, which is the most effective vehicle for lighting promotion now available to the electrical industry."

National Lighting Committee Appointed

◆ MEMBERS of the National Promotion Committee of the Planned Lighting Program, which has been organized by Edison Electric Institute to keep the electrical industry informed of new developments in Planned Lighting Sales activities, have been announced by Jos. S. Schuchert, chairman of the Committee.

"Organized on a regional basis, with every section of the United States represented by a leading figure in lighting promotion, this Committee will serve as a clearing house for successful Planned Lighting promotional and educational ideas, used in all markets by every element of the industry," Mr. Schuchert said. "Each Committee member will spark-plug Planned Lighting activities in his assigned area, passing along to electric companies information as to how this program is being used successfully, and serving as the source of new promotional suggestions and materials."

The Committee members appointed from southern and southwestern states are as follows:

Region D (Alabama, Florida, Georgia, Virginia, No. Carolina, So. Carolina, Tennessee, Louisiana, Mississippi)—J. M. Guilbory, New Orleans Public Service, Inc., New Orleans, La.

Region H (Kansas, Missouri and Oklahoma)—C. B. Gillespie, Missouri Power and Light Co., Jefferson City, Mo.

Region J (Texas and Arkansas)—C. B. Barron, Gulf States Utilities Co., Beaumont, Texas.

"Flag Label" Campaign Features Cord Safety

◆ REALIZING the public need for safety education in the selection and use of electric cords and cord sets, a nationwide campaign is being carried on by the International Association of Electrical Inspectors in co-operation with electric power companies and manufacturers.

This campaign, aimed at eliminating the hazards created by defective electric cords and cord sets, features the "Flag Label," which is placed on cord sets as notice of inspection by Underwriters' Laboratories and which, therefore, assures householders of high quality, safe cord equipment.

Pointing out that there are two kinds of wiring in the home—permanent and portable—the campaign emphasizes the fact that portable wiring is the responsibility of the homemaker. It explains that it is up to the users to make certain that individual flexible cords in service are of good quality, and that the simplest way to do this is to insist on buying appliances whose cords bear Flag Labels.

The campaign literature reminds people that these flexible cords carry the same voltage as permanent wiring, yet they are likely to be bent, kinked, pulled, stepped on, and generally abused. The need for cords of different types for different uses is also explained—why a power cord must be larger than a portable lamp cord to prevent possible overheating; why some cords must be oil- and moisture-resistant; why generally, care must be exercised in cord selection.

Simple electric safety rules are outlined in the campaign, with warnings not to run cords over radiators or steam pipes, under rugs, or through door jambs. Users are urged to disconnect heating appliances when these are not in use, and told not to disconnect appliances by yanking on the cord. They are reminded that portable cords are not intended as a substitute for ample, permanent, wiring but are a necessary and very important supplement, and that they should be examined regularly, even when properly used.

This vitally important campaign is being conducted in space advertisements, through brochures distributed by utility companies, and by direct mail contacts with insurance companies, schools, fire departments and other organizations. It promotes the newly published and extremely helpful booklet, "Electrical Safety in Every Room," with the suggestion that copies may be obtained from local service and educational sources.

Trumbull Marketing On Regional Basis

◆ A RECENT announcement of the Trumbull Electric Mfg. Company, of Plainville, Conn., reports a new plan of organization under which the company's Marketing Department will operate on a regional basis. Under this new plan, over-all company marketing activities will be carried on in each of four geographical regions under the direction of regional managers.

Richard C. Lipps has been appointed Eastern regional manager, and in this capacity is responsible for all marketing activities of the Trumbull Company in the East, which includes Field Sales Districts and sales engineering functions from Maine to Georgia. A native of Boston, Mass., Mr. Lipps has been with the Trumbull Company for the past 20 years and has at various times acted as manager of the Switchboard Department, advertising manager, manager of the West Works at Plainville, and, immediately prior to his present assignment, was district sales manager for New York.

Allan A. Watson has been appointed Central regional manager which gives him responsibility for marketing activities in the Middle West and South, including Field Sales Districts and sales engineering functions extending from Western Pennsylvania to Colorado and as far north as Canada. Mr. Watson, a native of Farmington, Conn., has been associated with the Trumbull company since 1936 and has held numerous appointments in the Marketing Department. He has been manager of the Norwood, Ohio, Works of the company and field sales manager.

Trumbull's marketing activities in the California Region will be under the direction of J. Warren Barry. The Northwest Region will be under the managership of W. T. Downie.

NATIONAL ELECTRIC'S CAA-APPROVED CABLES

CAA APPROVED CABLES

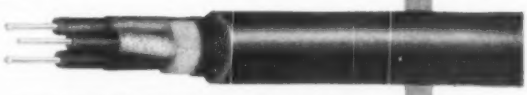
Approved under specification L-824

Now that the CAA's airport lighting program has been given the "green light," there's a *sure* way to meet the rigid requirements of Civil Aeronautics Authority Specification L-824, "Underground Electrical Cables for Airport Lighting." *Specify National Electric Style RR Flexlay Cables!*

NE Flexlay Cables are *dependable* for the continuous service conditions required by airports. Designed for underground installation—either direct burial in the earth or pulled in conduits—these cables have plenty of "abuse resistance" built-in. The tough, specially-compounded Neoprene sheath affords complete protection against the destructive forces below the earth's surface, as well as sun and weather.

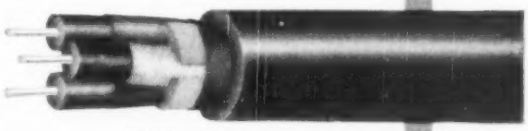
NE CAA-approved cables are recommended not only for airport lighting and signal circuits, but for street and highway lighting, municipal, power and other installations—indeed wherever *reliability counts the most.*

You're sure of safe, dependable operations when you specify National Electric CAA-approved cables in your next airport installation.



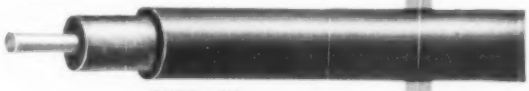
TYPE "A" PERFORMANCE INSULATION

Flexlay Cable, Style RR, Airport Lighting Cable, 600 Volt Rating, AWG Sizes 4 through 16. (Single and Multiple conductor available)



TYPE "B" OZONE RESISTANT INSULATION

Flexlay Cable, Style RR, Airport Lighting Cable, 3000 Volt Rating, AWG Sizes 4 through 10. (Single and Multiple conductor available)



TYPE "B" OZONE RESISTANT INSULATION

Flexlay Cable, Style RR, Airport Lighting Cable, 5000 Volt Rating, AWG Sizes 4 through 8. (Single Conductor)

Light in weight—Flexible
Easy to handle

EVERYTHING IN WIRES AND CABLES

National Electric
PRODUCTS CORPORATION

1307 CHAMBER OF COMMERCE BUILDING, PITTSBURGH 19, PA.

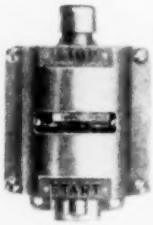
Monitor
HAS IT . . .

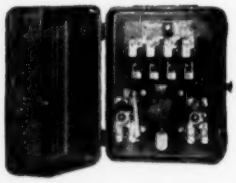
whether you need custom-built or standard

MOTOR CONTROL EQUIPMENT

If your requirements call for standard equipment, MONITOR Controls will meet every specification. If you require a complete custom-built control unit, MONITOR engineers will design and build the unit to do the specific job. For quality motor controls . . . look to MONITOR!

Type VB Heavy Duty Push Button Control Station . . . eliminates dangers of careless or accidental starting and stopping by operators.





A.C. and D.C. Motor Starters across-the-line, reversing, non-reversing and combination units.

The
MONITOR CONTROLLER CO.
Braintree 84, Mass.

REPRESENTED BY

B. S. WOODMAN
1570 Northside Ave.
Atlanta, Georgia

L. L. ROUSSEL
321 E. Livingston Pl.
New Orleans, La.

LYNN ELLIOTT CO.
322 M. & M. Building
Houston 2, Texas

NAMES IN THE NEWS

H. E. (Gene) West, formerly located in New Orleans as division sales manager of the **Anaconda Wire and Cable Company**, has been assigned broader responsibilities which include the co-ordination of sales promotion activities with electrical contractors and wholesalers on a national basis. In his new capacity he will be located in Washington, D. C.

Mr. West is well known in the electrical industry, having started in the electrical business in 1913 with one of the larger electrical manufacturers. He has been associated with the Anaconda Wire and Cable Company in various capacities in the sales department since 1935.

•

Addition of two new members to the board of directors of **Dallas Power & Light Company** and two new officers to the executive staff was announced by **G. L. MacGregor**, chairman of the Board and president of the company, following the stockholders' and directors' meetings recently.

Directors added at the stockholders' meeting are **R. L. Thornton**, chairman of the Board of Mercantile National Bank of Dallas, and **Fred F. Florence**, president of Republic National Bank of Dallas.

The new officers appointed by the directors are **C. A. Tatum**, commercial manager, and **L. J. Blaize**, assistant to vice-president, both of whom were elevated to vice-presidents.

In announcing the additions, Mr. MacGregor pointed to the company's need for an enlarged directorate and executive staff to meet the problems of operation brought about by the great expansion which is taking place in the company's properties and in the use of electric service in Dallas.

C. A. Tatum

L. J. Blaize

Mr. Tatum, a native of Dallas, joined the company upon graduating from Southern Methodist University in 1928. After serving in various capacities in the commercial department of the company, he became assistant commercial manager in 1934, and commercial manager in 1939.

Prior to his appointment as vice-president, Mr. Blaize had spent twenty years in the engineering and executive departments of the company. A native of Mississippi and a graduate of Mississippi State College, he entered the company in 1930 as an electrical engineer engaged in design and operation. In 1943 he was made assistant to vice-president with general administrative duties, and in 1944 was elected to the board of directors of the company.

•

Howard G. Haas has recently been appointed assistant advertising and sales promotion manager for the **Mitchell Manufacturing Co.**, of Chicago.

Mr. Haas was formerly director of newsstand sales promotion for Coronet magazine. Prior to that he was newsstand sales promotion and public relations director for *Esquire* magazine.

•

Jack L. Kaplan, president of **Beacon Lighting Products Corp.**, Chicago, Ill., has announced the election of **Harry W. Rothenberg** as executive vice-president and general manager of the company's plant and offices.

Mr. Rothenberg has had 21 years of production background in the lighting industry, some 15 years of it with the American Lantern and Manufacturing Company of Cleveland, Ohio.

For the past four years, he was president and general manager of the American Lantern and Manufacturing

Co., having come up from the ranks.

The addition of Mr. Rothenberg is expected to enable Beacon to greatly expand its facilities.

•

The **Simplex Wire and Cable Company** announced recently that in order to give better service to its customers, and to streamline its organization, it has made the following personnel changes:

G. L. Roberts has been elected vice-president and will remain in charge of the sales activities of the company. **G. A. Grauer** has been appointed sales manager, succeeding Mr. Roberts.

E. W. Davis has been appointed director of engineering. **G. J. Crowdes** has been appointed chief engineer, succeeding Mr. Davis.

E. J. MacKenzie has been appointed advertising manager.

•

G. W. Hart has been appointed manager of advertising, sales promotion and sales training of **General Electric Company's Air Conditioning Department**, it was announced recently by **H. B. Donley**, manager of marketing. Mr. Hart succeeds **E. S. McKay**, who has joined the staff of **Robert S. Peare**, vice-president in charge of the company's public relations.

Prior to his appointment, Mr. Hart was manager of market research. From 1948 to March, 1949, he was assistant to the marketing manager.

A native of Pennsylvania, Mr. Hart was graduated from Bucknell University with a B. S. degree in electrical engineering in 1927. From 1929 to 1936 he was a commercial engineer with the Consolidated Edison Company in New York. For the following six years, he served as a sales and advertising consultant for Ebasco Services, Inc., New York. After serving three years in the U. S. Navy, he returned to civilian life with the rank of Lieutenant Commander.

G. W. Hart

Mr. Hart is a member of the American Marketing Association, American Institute of Electrical Engineers, Institute of Radio Engineers, and Tau Kappa Epsilon.

LET'S LOOK AT IT THIS WAY!

from any angle COMPCO SLIMLINE is a L-O-N-G profit fixture

EXTRA COMPCO QUALITY AT NO EXTRA COST

You can't see it here, but once you lay your eyes on a COMPCO fixture you'll see what we mean by *extra* COMPCO QUALITY. It's there in the attention to fabricating details, in the hardware, in the wiring, in the nationally known and recognized components. Yes, important too, is the integrity of a company that backs up its products with a rock-bound guarantee of performance. And, you'll buy COMPCO products at competitive prices. *Write for our catalog and see.*

Compco CORPORATION

For the Finest in Fluorescent Fixtures

2241 W. St. Paul Avenue, Chicago 47, Illinois

Compco

THE COMPLETE 8 FT. FIXTURE CAN BE QUICKLY AND EASILY INSTALLED BY ONE MAN

Complete fixture shipped in one 4-foot carton • Positive catch, spring type sockets • Instant starting • Starters are eliminated • Maintenance costs are drastically cut • *Both the industrial and commercial fixtures can be surface or suspension mounted (rigid or in continuous rows)*

PRECAUTIONS: Be sure you have the correct number of lamps for the ballast you use. Other units make a handsome point for a cold

Available In:

96, 2 LIGHT 200 MA, 2 LIGHT 300 MA, 2 LIGHT 430 MA
96, 4 LIGHT 200 MA, 4 LIGHT 300 MA, 4 LIGHT 430 MA
48, 2 LIGHT 430 MA
48, 4 LIGHT 430 MA

Hinged removable louvers available for all above sizes.

NEW PRODUCT NEWS

Temporary Outlet Closure

A USEFUL DEVICE for electrical contractors, which enables them to keep outlet and switch box holes clean and free of plaster, is being manufactured by Coleman Products Co. of Chattanooga, Tenn.

This die-cut cardboard temporary closure for electrical outlets is designed to be inserted into the box opening while walls are being plastered. The red cardboard and the printed message "Do not cover up" warn the plasterers of the special nature of the outlets. Two small tabs extending above and below protect the box cover screw holes.

In using the temporary covers, the tabs at each side are bent back along scored lines; then the cover is pressed into the box opening with the side flips inside the box.

•

Closet Light

A COMPLETE one-piece automatic closet light unit that can be installed in a few minutes time in a closet door, is being introduced by Slater Appliance Division, Slater Electric & Manufacturing Company, Woodside, Long Island, N. Y. This Kloz-A-Lite is attractively packaged, measures 2 x 2 inches, comes with twelve feet of cord and two screws—all that are needed to hold it in place.

The unit fits any closet door, is easily installed in a matter of minutes, quickly detached for moving. It is a portable one-piece unit with switch, socket and cord combined and requires only a hole.

The switch operates automatically by the action of the closet door on the push button, and is designed to be put in either upper corner of the door frame. The light goes on when the door is opened, goes off when door is closed.

The Kloz-A-Lite assembly makes it possible for any closet to have the convenience of lighting, which heretofore has been largely limited to newer houses where closet lighting has been built in. Installation is so simple that a housewife or teen-ager can attach the fixture. The unit is priced to retail for $1.98.

•

Luxury Fluorescents

A "LUXURY" LINE of fluorescent lamps which provides a more mellow white than the light of former tubes now is in production at its plant in Fairmont, W. Va., Westinghouse Electric Corp. reports.

The lamps utilize a recently developed phosphor producing light with a color balance spanning the spectrum from violet to deep red.

This de luxe light is more flattering to human complexions, fabrics, and foods, but because the new phosphor is less efficient, the standard white lamps heretofore available likely will continue popular.

The new lamps are known as de luxe cool white and de luxe warm white. To designate companion high efficiency colors, Westinghouse changed the name of its former 4,500-degree white fluorescent lamps to standard cool white. Its former warm white lamps become standard warm white. The company said it will continue to offer fluorescent lamps also in daylight, soft white, and white colors.

•

Offset Bar Box Hangers

COMPLETE assortment of offset-type bar hanger boxes for both armored and nonmetallic cable installations have been announced by General Electric's Construction Materials Department, Bridgeport 2, Conn.

Ease of installation is a feature of this new assembly, which incorporates a heavy-duty two-piece stud that assures complete rigidity of the box. The stud is easily removed from the bar hanger when necessary, and the tightening screw, if the stud cup is so designed that it will not fall out when the stud is removed.

The 15 inch offset bar hanger is 18 inches in length with three nail holes on one end and one on the other. Bar

PARANITE PARA-THERM (TYPE RH BUILDING WIRE)

CARRIES MORE CURRENT PER DOLLAR OF COST

J. O. TYPE RH

250,000 CM. TYPE R

Above examples are 200 amp. Circuit

Its higher amperage rating under the National Electrical Code affords greater current carrying capacity.

Smaller conductors, smaller sizes of conduit and fittings, and lower labor cost — all are available to you by proper application of Paranite Para-therm (Type RH) Wire and Cables.

All Paranite products are made under the watchful eye of S. Q. C. — Statistical Quality Control.

IF IT'S PARANITE IT'S RIGHT!

DISTRIBUTED THROUGH WHOLESALERS

PARANITE WIRE AND CABLE
Division of ESSEX WIRE CORPORATION • FORT WAYNE 6, INDIANA

ELECTRICAL WIRES AND CABLES "BETTER THAN CODE REQUIRES"

WAREHOUSES AND SALES OFFICES: Atlanta, Ga., Boston, Mass., Chicago, Ill., Cleveland, Ohio, Dallas, Texas, Detroit, Mich., Kansas City, Missouri, Los Angeles, Calif., Newark, N. J., Philadelphia, Pa., Portland, Oregon, St. Louis, Missouri, San Diego, Calif., San Francisco, Calif.

EXPORT SALES OFFICE — Lionel Essex International Corporation, 15 E. 26th St., New York 10, N. Y.

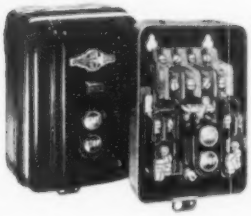
hanger assemblies with either standard 3½-inch or 4-inch octagon boxes are available.

•

Magnetic Starter

A NEW MAGNETIC starter in sizes to 5 hp. 220V A-C, 7½ hp., 440-550v. A-C is announced by Furnas Electric Company, Batavia, Ill., manufacturers of electric motor controls.

The new starter is furnished with (1) dual voltage coils, (2) with or without built-in pilot controls, and (3) in general purpose or water-tight enclosures.



The recently developed Furnas Switchlet quickly attached to either side of the starter provides a means for adding extra circuits. Full description of the new magnetic starter is contained in catalog 50, sent on request by writing Furnas Electric Company, 1064 McKee Street, Batavia, Illinois.

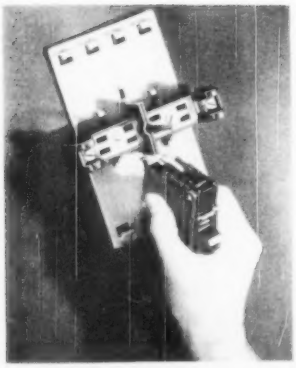
•

Air Circuit Breaker

A NEW air circuit breaker, "Stab-lok," has been announced by Federal Electric Products Co., 50 Paris St., Newark 5, N. J.

The new breaker is of unit-pole construction and has thermal-magnetic overload. The manufacturer claims it can be inserted in an enclosure more easier and faster than a fuse. The breaker consists of two assembled parts, two springs and a handle, assembled in a case.

With only nine enclosures, the line can be substituted for hundreds of fus-



ILLINOIS HAS everything YOU WANT IN EQUIPMENT PORCELAINS . . .

HIGH DIELECTRIC STRENGTH

HIGH MECHANICAL STRENGTH

COMPLETE UNIFORMITY AND EXACT DIMENSIONS

These are the *plus* qualities you get with every piece of Equipment Porcelain made by Illinois! The whole process of manufacturing electrical porcelain is characterized by extreme care, not only in controlling the chemical composition of ingredients, but the particle size, moisture content, and the drying and firing temperature.

ILLINOIS ELECTRIC PORCELAIN CO.

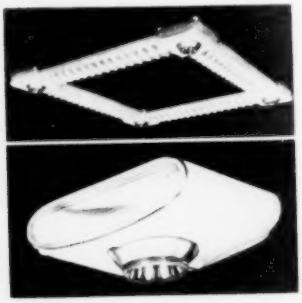
MACOMB, ILLINOIS

ible and circuit breaker devices which Federal now manufactures. A two-pole, simultaneous trip breaker is included in the line.

•

Sylvania Trimspots

NEW LIGHTING which will fit in with and follow the architectural design of stores has been made available by Sylvania Electric Products Inc., 60 Boston St., Salem, Mass., with the introduction of six new incandescent Trimline spotlight fixtures. Known as Trimspots, these new units match and give even greater flexibility to the company's series of thirteen shielded fluorescent Trimline Fixtures.



Both the single and twin spotlight units are designed as companions to the two- and four-lamp fluorescent Trimline fixtures and have the same style decorative end pieces. Each Trimspot fixture is equipped with one or two 150-watt PAR-38 spot lamps which can be rotated in a 360° arc and tilted up to an angle of approximately 20°.

•

Canvas-Back Loomwire

TWO IMPROVEMENTS have been announced by National Electric Products Corp., Chamber of Commerce Bldg., Pittsburgh 19, Pa., in the design of its canvas-back loomwire, a non-metallic sheathed cable.

The No. 14 and No. 12 cable, with Type T or Type R conductor insulation, now have a "frosty finish." According to the maker, this exterior finish feels cool, smooth and hard; will not stick to hands, and cannot flake or rub off.

The "frosty finish" is said to allow the cable to be handled or stored in warm locations without becoming tacky and considerably improves the ease of installing the cable.

Stripping is improved due to the insertion of a paper dam completely around the conductor assembly, under the sheath. This dam or barrier adheres to the sheath when stripped and assures the conductor assembly remaining clean at all times, and the conductor markings always being sharp and distinct.

National Electric says the two product changes improve the moisture and flame-resistant qualities of the canvas-back loomwire protective braid. Underwriters' Laboratories, Inc., list the new non-metallic sheathed cable.

•

R & S Ever-Lok Devices

RUSSELL & STOLL Company, Inc., New York 7, N. Y., announce the obtaining of higher ratings, with Underwriters' Laboratories listing, for following R & S Receptacles, Plugs, and Connectors: Midget Ever-Lok series; Standard duty Ever-Lok, and type FS (waterproof) series, and 30 amp. Ever-Lok devices.

Used as a component for all kinds of portable electrical equipment, Midget Ever-Lok units are for use in business offices, hospitals, hotels, institutional buildings, shops and factories. With the increased rating they are suitable for fluorescent lighting and similar applications. Bulletin EL49-17 describes these units.

The increased ratings of the R & S Ever-Lok standard duty, Type FS (waterproof) series, and 30 amp. Ever-Lok receptacles, plugs, and connectors will considerably extend the applications of these devices, and afford a greater margin of safety. These units are described in Bulletin EL446-17.

All above mentioned products are available for either surface, flush, or panel mounting. Also furnished in Reverse Service for use as components of motors and machines, etc., male interiors in receptacles or connectors and female interiors in the plugs. (Add suffix "R" to catalog numbers.)

•

Improved Switch Box

A NEW SWITCH box, called the G-E Levelock, has been announced by General Electric Company, Bridgeport, Conn. Designed for faster installation, this new box has a new, improved locking mechanism that wedges the side plates tightly in position.

This feature allows the Levelock to take extra severe abuse without dislodging the side plates, either when being mounted or during scribing for lath or wallboard cutouts. An extra set of nail holes is provided for rapid mounting to studding.

Four contact points on the side plates allow steady, even mounting of the box with no rocking or tilting. Side pry-outs are provided to take care of out-of-the-ordinary installations. Single screw ear allows adjustment from better than flush to ⅝-inch below the edge of the box. The Levelock box is easily gangable with other boxes.

Additional information can be obtained from the General Electric Company, Construction Materials Department, Bridgeport, Conn.

Neon Pilot Light

A NEW IDEA in pilot lights is offered in the P&S Despard flush neon pilot light. Long life and absence of heat are two of the many advantages of this unit in the interchangeable P&S-Despard line.

The unit is available in brown or ivory, has an unbreakable prismatic

Pyrex lens dome and is rated at 1.25 watt, 125 volts. Further information can be obtained by writing the manufacturer, Pass and Seymour, Inc., Syracuse 9, New York.

•

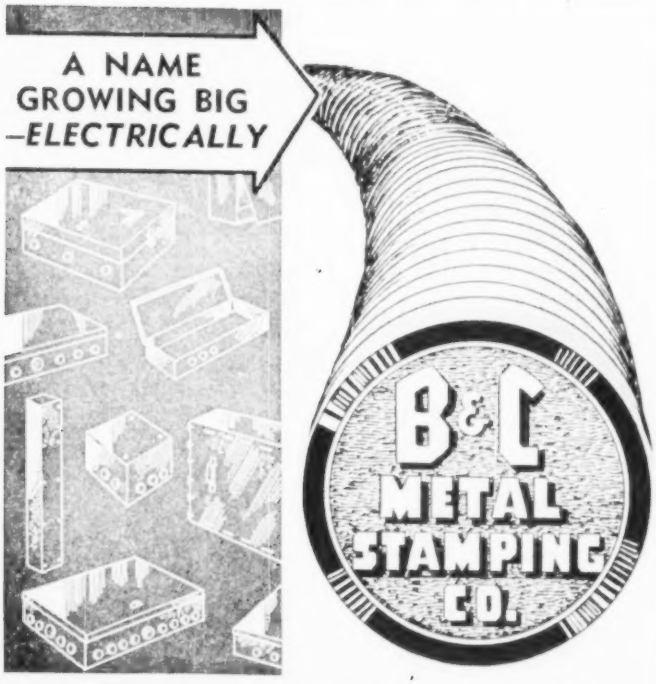
Portable Thermostat

A PORTABLE thermostat for use with portable electric heaters is being introduced by Electric Controls, Inc., Swan Island, Portland 18, Oreg. It requires no special wiring—no permanent wall installation. It combines a super-sensitive, amazingly accurate E-C Thermostat with a cord and series adapter plug.

The manufacturer claims that this exclusive and patented arrangement offers all the advantages of a standard line voltage wall thermostat at a fraction of the installed cost of such a unit, besides being portable.

Any portable electric heater rated up to 15 amperes, 110-125 volts a.c. may be controlled by the E-C Portable Thermostat. It will maintain a desired temperature within one-half of one degree Fahrenheit.

The E-C Portable Thermostat has a built-in hanger at the top so it may be moved from place to place by simply un-plugging it and lifting the unit off the hook.



NEW ADDRESS — 590 MEANS STREET N. W. — ATLANTA, GA.

At Last

A SAFETY ISLAND LIGHTER THAT MARKS THE SPOT

It's a Revere ELECTRIC MFG. CO. CHICAGO, ILL. UNIT

Now the stubborn problem of adequate illumination of Safety and Traffic Islands is mastered through the introduction of these ON-OFF REVERE Standards, he full and illuminative he bumper and safety island, plus spotlighting the traffic officer when on duty.

Write for full particulars on these new REVERE developments.

Also available in a Median Mounted Type for divided traffic lanes and loading platforms.

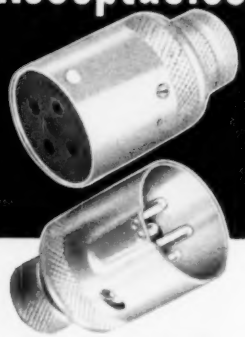
HIGH MOUNTING UNIT NO. 852

OBSTRUCTION LIGHTS ARE MOUNTED AT EYE LEVEL OF MOTORIST

REVERE ELECTRIC MFG. CO.

6005 BROADWAY CHICAGO 40, ILL.
LIGHTING EQUIPMENT TO SERVE EVERY NEED

TRIPLOC Plugs and Receptacles



1, 2, 3, 4, 6, 8 pole interchangeable and reversible contact units

An Exceptionally Versatile Line in the Heavy Duty Field

An exceptionally versatile line, unequalled in the heavy duty field, with a virtually unlimited number of assembly combinations to meet the individual requirements of *any* portable electrical equipment.

Interchangeable contacts, 1 to 8 poles, can be assembled in standard plug shells and receptacle housings. The protected female contact unit can be assembled in either plug or receptacle for safety in the line side of the circuit. Fusible types and units with one pole grounded are also available.

Automatic bayonet lock with either manual or combination manual and automatic release protects equipment and wiring. Wide range of pressed steel plug shells, receptacles, and cord connectors available in the complete Triploc line, including cast metal housings threaded for watertight gasket seal. Ratings up to 20 amperes, 250 volts DC, 460 AC. Consult your Pyle Catalog 1100, Bul. 1110-1, for complete listings.

CONDUIT FITTINGS • FLOODLIGHTS

SINCE 1897

THE PYLE-NATIONAL COMPANY

1354 N. Kostner Ave., Chicago 51, Ill.

Luminaire for School Use

THE MITCHELL Manufacturing Company, 2525 Clybourn Ave., Chicago, announces two new lighting fixtures designed for school or office use. Low in cost, high in lighting efficiency, these 4-foot and 8-foot fixtures are available both with and without louvers.

These outstanding instant-start fluorescent luminaires are ideal for school, office and institutional lighting since they are of all-steel construction with no glass to clean or break. The push type lampholders make for easy relamping and the 2-position louvers are easily taken out or replaced by one man.

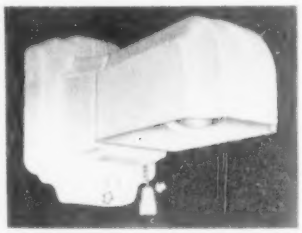
The 4-foot fixture, No. 3026, uses 2-40 watt T-12 single pin lamps and the 8-foot fixture uses 2-75 watt T-12, single pin lamps. Both have instant-start operation and light instantly without any starters. The exclusive Mitchell 2-position lock louvers are easily handled, the 8-foot unit having two separate louver sections. The illuminated side panels give indirect lighting that illuminates dark spots.

•

Paulding Wall Fixture

A HIGH QUALITY, low-cost fixture, molded from finest electrical porcelain and including a convenience outlet, has been announced. Completely wired and ready for installation, it is equipped with an opaque glass shade. Base size is 5½" x 5" and the cadmium plated mounting strap fits 3½" and 4" outlet boxes or Gem-X boxes.

The new wall bracket includes a pull-chain with a porcelain knob and a slotted concentric receptacle with double wipe bronze contacts. The product is



listed by Underwriters' Laboratories. The copper screw shell is cadmium plated and the internal parts and working mechanisms are of first class construction.

The unit meets a great and growing demand from wholesalers, contractors, retailers and consumers. It is ideal for residential, commercial, or industrial installation in bathrooms, lavatories, over kitchen sinks, washers, washbasins, workbenches, etc. It is recommended for use wherever directed light and an extra outlet are required from the same box. Four types are offered by John I. Paulding, Inc., of New Bedford, Mass., the manufacturer.

Relay Department

(Continued from page 23)

order to reduce the number of purchase orders handled for small amounts of standard stock items.

The two desks in the shop are held over from the time when only two test crews reported there. Now that there are at least three crews totaling six men reporting to the shop, it is planned to replace the two desks with tables so all may have an equal working space.

Calculating Board Facilities

Also located in the shop is a sine calculating board permanently set up and powered by a small 125-volt d-c generator. The fronts of the positive and zero sequence sections have one-line diagrams of our 132, 110, 66 and 44 KV systems in distinctive colors to identify the various voltages, and with jacks located in appropriate places for applying a fault and for plugging in an ammeter to read the distribution of current in the networks.

No attempt is made to identify the individual sections of the networks below 44 KV except to hang the generator and properly connect it to the system.

The negative sequence network is assumed to be equal to the positive and is represented by a single variable resistor which can be quickly adjusted to the overall value of the positive sequence for any given set of conditions.

On the control panel are located the controls for the supply generator and its driving motor, a voltmeter, milliammeter, selector switches for connecting the meters to the networks, and a large switch for selecting the type of fault it is desired to apply.

There is also a portable dc calculating board having 72 standard resistance units and means for interconnecting them. This can be set up temporarily to represent any of the networks not

SLIMLINE & FLUORESCENT BODIES

STA-RITE FLUORESCENT MFG. CO.
331 NW. 72nd Lane, Miami, Fla.

on the permanent board.

When the general office building is enlarged as planned, it is expected to have all offices of the Relay Department grouped together and the shop space in a different location. However, present experience indicates quite an advantage in having the shop as close to the office as practicable.

Duties of Personnel

Correspondence at the area assistant relay engineer's desk consists mainly of copies of letters by the system relay office which would concern him, letters from district personnel concerning changes and proposed changes, and the assembling of reports on work completed or proposed. The majority of work, however, where a Relay Department representative has to be present, is scheduled by a telephone call from the local personnel to the assistant relay engineer.

Prints for construction come to his desk for use in preparation for field checking of new work and for keying in the new work with other existing equipment. Many manufacturers' and contractors' prints come to his office for checking and correction before approval by the relay engineer. He and his assistant originate requisitions for the purchase of most equipment used for relay maintenance, such as removal parts for equipment and line relays and other control equipment where they replace existing equipment, or for other improvements.

Personnel matters do not consume a large portion of time, but they are by no means to be considered lightly.

The field work done by the assistant relay engineer consists mostly of inspection trips for a survey of proposed or completed work, spot checks for routine testing, final checks on major installations, and helping the engineering assistant when he is in doubt or cannot be expected to know just what to do.

A large part of the assistant relay engineer's time is quite often spent poring over plans with the engineering assistants, while the prints are being assembled or corrected preliminary to installation.

The time of the engineering assistants is divided between field checking and office work. They check and correct some manufacturers' and contractors' prints for approval. When they check them for construction they see that they are clear and complete. Additional wiring sketches are made up as necessary to completely connect the new work together or to existing equipment.

If major wiring is to be done by Vepco personnel, the complete wiring diagram is sketched and taken to the System Drafting Department for final entry on a formal Vepco tracing.

After the job has been completed, he sees that all field corrections are added to the tracings or that the manufacturer gets a field-corrected print so he may supply us with corrected prints.

On smaller jobs, a pencil sketch along with the original drawing is often used and the tracing is corrected after the change has been made. Either a member of a test crew or an engineering assistant checks new wiring installations depending upon the length of time necessary to make the check and the amount of test equipment needed to make any settings.

The engineering assistants collect and process the necessary field data and either calculate the fault currents for any necessary relay settings or they set up the quantities on the temporary calculating board described previously and determine the fault currents from that. In case of transmission the fault currents can be taken directly from the permanent calculating board. With this fault current information he will then determine the relay settings needed.

It has been found most helpful to assign each job to one engineering assistant and to hold him responsible for all Relay Department connections with that job from the beginning until it has been completed and all field corrections have been made on the

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SIMPLE – slips in from outside.
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3. Game Room
4. Laundry

Cash in on owner demand with Blo-Fan Spot Ventilation at the Point of Air Pollution

PRYNE & CO., INC., Box 5.8, Pomona, California

prints. In this way, he can much more easily catch any missing item than anyone else and it relieves the assistant relay engineer of an impossible amount of detail. Besides, the engineering assistant will take quite a bit of pride in his work because he has a definite job to do.

Relay Test Crews

Transportation equipment for the relay test crews consists of three 1949 Model Ford club coupes and one light truck. Each crew is permanently assigned one piece of transportation equipment which they use continuously and for which they are responsible. All their test equipment is kept in the car or truck, with the instruments and any other delicate equipment kept in specially built rubber-lined compartments.

In each area, one test crew is responsible for semi-annual and installation tests of transmission relays with the rest of their time spent on distribution. The other crew is responsible for annual and installation tests of distribution relays. On installation tests a thorough check of wiring is made on the breaker mechanism, the panel, and the interconnecting conductors as well as completely checking relays for condition and setting them. Primary and megger tests and an over-all operating test are made. Phase meter readings are taken when necessary.

The relay test crews are responsible for getting relay information and test information and entering it in the relay record file. This is a Kardex file with the top one of the two cards per circuit marked "Relay Record" and having space for ratios of current and potential transformers, type of test switch, and by phases, the relay type and other information considered necessary. At the bottom of this card is space for any appropriate remarks such as type of tripping and any testing peculiarities.

The bottom card is marked "Test Record." There are two kinds of these cards, one for distance relays, and the other for overcurrent and directional overcurrent relays. On each is a column for "date tested" and enough information listed so that the card could be used to actually set the relays.

In order to quickly check the number of circuits tested since the beginning of the year, colored tabs are placed on all test cards as of January 1 and are removed by the test crews as the circuits are tested during the year. Also, tabs of different colors are used to indicate whether the circuit was last tested the past year, the year before that, or longer.

In the case of the test crew located in Charlottesville, information is sent in to the Richmond office where it is entered in the records by one of the engineering assistants.

This is fine for the records in the office where they can be referred to quickly, but they can do the relay testers little good unless they place a telephone call — in some instances 200 miles away even if a telephone were available.

To overcome this, the test crews each have a list made out

Get MULTIFLEX BRUSHES for

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U. S. Pat. 2,181,076

Yes, Helwig-Speer Multiflex Brushes give you the "big three" of motor and generator performance. The best in design and materials means: (1) uninterrupted contact, (2) reduced vibration, (3) reduced circulation current, even wear. What's more, you get double-brush advantages with single-brush simplicity. Multiflex fits conventional single-brush holders. For complete information on ordering brushes, write for Catalog 95.

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Atlanta, Birmingham, Dallas, Houston, St. Louis, El Paso

HELWIG CO., Carbon Products
Makers of Multiflex and Transert Brushes

on sheets in a ring binder by stations and circuits which gives them the complete relay settings including date of last test which is changed at each test and the information passed on to the other test crew. About twice a year the two crews get together and go over the office records and theirs to compare them item by item to be sure all three records agree.

The question may be asked why the relay testers could not copy from the records the relay test data that they need each time they start on a trip, since they would know what circuits they will test while gone. The test crews do not, generally speaking, do their own switching but instead have to depend on local personnel to do switching for them. This leads to complications in finding a qualified man available and quite often the circuit planned for test is too heavily loaded to permit bypassing or transferring the load. The result of this is that a test crew going to Norfolk, for instance, could conceivably be called on to test any of about 300 odd sets of relays.

New men in the Relay Department are used as helpers in the relay test crews. This offers them good training for future use as engineering assistants in that it acquaints them with the equipment and our methods as well as the local personnel. The relay testers themselves rarely are technically trained men.

Teach the Code

(Continued from page 19)

book by Arthur Abbott gives many reasons. We can, with a little thought, give many of the reasons ourselves. Don't be afraid of being asked a question for which you don't know the answer. The more we learn of our industry the more we realize how much there is to know, and just how little any individual can know. A good rule in any organization: "If you are not sure you know, ask the boss, if the boss doesn't know, he will find out."

After completely covering a simple residential job, take one with more area—add a range—a water heater—a fan or heating system motor. Cover it completely.

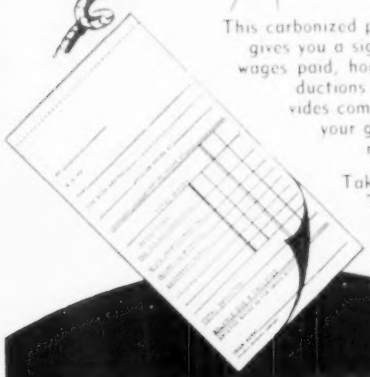
Then take a four-family apartment house with bare Code requirements. Add ranges, then water heaters. Work out the service and feeder sizes for both single and three-phase service.

Take a store with the minimum amount of load and work it up with special lighting and power loads.

Lay out a job with 3 or 4 motors. Cover it completely. Expand it with a few more motors of different sizes. Cover it. Add a slip ring motor. Cover it. After you have covered jobs which you have done or are doing, expand your practice layouts to cover larger jobs.

One rule we must always keep in mind and enforce is 1105, which states that electrical equipment shall be installed in a neat and workmanlike manner.

Mr. Electrical Contractor don't get your Wires Crossed



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OKONITE
MAKERS OF
Panther and Dragon
friction and rubber tapes

NON-METALLIC — BX
& GROUND WIRE

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SERVICE ENTRANCE CAP

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Sold Thru
Your Local Wholesaler

ATLANTIC CONDUIT
FITTINGS CO.
BOSTON, MASS.

We all get a great deal of satisfaction out of a job well done. A job that is not only safe, convenient and efficient, but which also is pleasing to the eye. We stop looking at our work when we finish a job and leave it. Our customer will look at the job so long as he uses it. Anything unsightly will put a bad taste in his mouth every time he sees it. We can all get neat work if we teach our employees properly and demand that they be consistent in their neatness.

As we study the Code we will find that our study will not be confined to the Code alone. Anything pertaining to our industry can come up. Motors, transformers, lamps, heating equipment, signal and communication equipment—the list is endless.

To obtain information regarding these various types of equipment, we will need to have on hand some good books. If we are able to get only one good idea from a book, that one idea is well worth the price of the book. Good technical books are obtainable from any one of several publishers who are glad to send books on approval.

Our increase of knowledge and its application measures our ability to keep pace with our expanding industry, and to personally render the service it takes to succeed in our work. Unless we wish to render all this service personally, we must have a good service organization. This we cannot have unless our knowledge is passed on to our employees.

It takes an interest on the part of the employees to learn. If he is not interested, he will never make a good employee. An employee who shows interest, who applies himself and wants to learn, will usually make a good employee. As he advances, he will require less and less supervision. We will find that he will give satisfactory work with very little supervision. That is the type of worker we all want, and there has never been enough of this type to go around.

It is to the advantage of the electrical contractor to teach his employees the National Electrical Code, to teach them good workmanship, to teach them everything he possibly can applying to their work, because it will increase the contractor's ability, it will increase his employee's abil-

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If it's fluorescent
MAKE IT SLIMLINE
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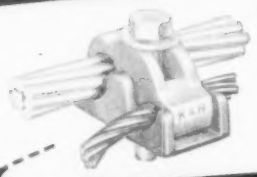

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UNIVERSAL Tap Connector
Made in 3 Surface Finishes
Approved by Engineers and
Contractors doing R E A work

Effectively used as guy line ground, or transformer and lightning arrester connection to A.C.S.R. or copperweld conductors where the diameter may be from 8 A copperweld to .595" A.C.S.R. armour rods.

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ALWAYS SPECIFY THE BEST
WHITER THAN WHITE
ABOLITE
Lighting
• Industrial
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The JONES METAL PRODUCTS CO.
WEST LAFAYETTE, OHIO
Sold Exclusively through Electrical Wholesalers . . .

35% and it will increase the ability in both as a team in rendering the service deserved by our customers.

Overhead

(Continued from page 17)

thinking — or lack of thinking. If he has not taken his overhead expenses into consideration, his bid makes another's bids exorbitant. And what recourse does the contractor with a full knowledge of his business have?

He has a choice. He, too, can underbid, knowing in advance he is doing so. He can console himself with the thought that if he wants to hold his organization together, he can afford to lose fifty cents better than he can a dollar. On the other hand, he can stand pat and be accused of hijacking his customers.

This situation would not be nearly so bad if the smart contractor could sit back until all the offenders went broke. But as quickly as one of the present crop vanishes from the scene, another pops up to take his place. An endless chain that replaces its own broken links is tough to compete with!

If the customer receives more than he pays for, and he does in many cases, how can the electrical contractor hope to survive?

In the last analysis, the contractor does not regulate his prices. His prices should be determined by contributing factors beyond his control. His current overhead expense is one of these contributing factors. The customer demands efficiency and service. Demanding it, he must stand prepared to pay for it!

Nine times out of ten, it isn't the customer who chisels. It is one contractor chiseling against the other. Placing the blame on the customer for these cut-rate bids is nothing more than the offender's thinly disguised alibi. It takes no courage to underbid a job. This thinking of the customer's welfare is a farce, that misleads no one! Were the underbidder's aims so altruistic, his charges would be sufficient, at least, to cover expenses and pay his supply house.

The unwary supplier usually bears the brunt of the underbidder's folly. But, then, the supplier is a business man. Consequently he protects himself. His mark up allows him to absorb a reasonable amount of credit losses. In the end, the contractor whose bids are allegedly exorbitant pays the freight coming and going!

A while back, I mentioned that a certain amount of intuition was involved in arriving at overhead expenses. Every contractor should have a clear over-all picture of his operations. He will know whether or not he is making money. It is up to the individual to locate his own individual problem. If he cannot put his finger on any tangible leak, it is safe to say his overhead is out of control. Why not enlist the aid of a competent auditor? And, of course, his fee will be charged off as overhead!

A contractor whose bids are characteristically high once told me: "When I find that I am getting a high percentage of my bids, I know I am too low; when I get too few, I know I am too high. In either case, I start investigating my current overhead expenses."

In all likelihood, if your dollar volume is less than last year's, your current overhead expenses will correspondingly show a higher percentage. That's simple arithmetic!

"SHERCO"

Staple

Says . . .

"Are those Benders getting too down? You'll save time and money with me because my sturdy legs just won't bend."

For Goodness Sake, insist on Genuine SHERCO Staples, packed clean and dry in plain or Hot Dip Galvanized Finish.

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3. Desert area — New Mexico or Arizona
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Will consider showing account for right people.

In reply state qualification, age, what car and model, income desired, type of an arrangement desired, educational background, references.

If sales agents, state what lines carried at present. We will not consider anyone who has more than four lines. Territories at present are still active, holding a nice volume of business monthly.

All replies held confidential. Will combine business if we see fit to show the adaptability to do so.

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"Thanks to the good workmanship, good service and good American Blower equipment that I supplied to my first customer, he's still a good friend of mine and a good customer, too," says John B. Rossi.

"You can't beat this combination for building a ventilating business and profits.

"You can't beat American Blower Products, either. They're recognized top-quality products, easy to install, and accurately rated. They operate better, and save power costs, too! I know, because I've been selling and installing American Blower equipment for many years."

If you want to build a profitable ventilating business, why not build it by selling equipment of proved quality? Phone the nearest American Blower Branch Office for details.

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Model C Ventura Attic Fans. Built in capacities up to 21,000 cfm for either vertical or horizontal operation. Low power consumption, quiet operation.

Utility Sets. For air supply or exhaust, foundries, schools, etc. Have Aleoto Control for regulation of air flow. Capacities from 312 to 15,925 cfm at ⅛" SP.

Model A Ventura Fans. Quietly styled. No exposed wiring. Smooth, easy-to-clean surfaces. Built in capacities from 1000 to 8200 cfm free-delivery. Heaters.

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Up to 24 x 3 x 3 feet*

YOUR parts or products can have the same high-quality, hot-dip galvanizing used on our own DIXISTEEL products. Small, tight spangles . . . smooth, uniformly-heavy coats of zinc . . . no fins. A tough, rust-proof finish that withstands severe bends without cracking or flaking.

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If it's exposed to corrosion...Galvanize it!

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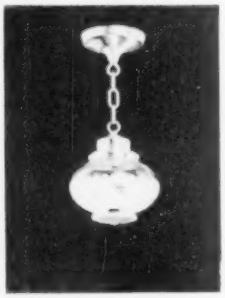

No. 1526

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Immediate orders can be filled, while critical materials are available.

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ELECTRICAL SOUTH

August, 1950

This is one section of the current issue of Electrical South.

Appliance Section

Household and Commercial Appliances • Radio • Television

DISPLAYS BOOST SALES — Especially mass displays of single items. Vertical arrangement of the merchandise as shown here is almost always best in island or floor displays. Color and light contrasts increase effectiveness.

IN THIS ISSUE

Clinching that Sale — Pg. 64
NARDA Cost-of-Doing-Business Survey — Pg. 66
Housewares are Leaders — Pg. 72

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CHATTANOOGA, TENNESSEE

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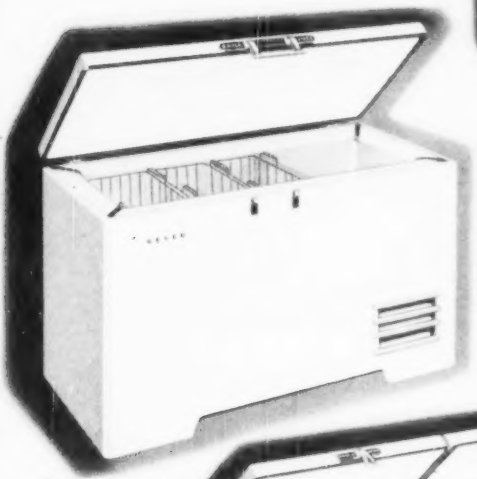
CHILL CHEST

FOOD FREEZERS

8 CU. FT.

CHILL CHEST
MODEL FF-81
320 Lbs
Capacity



15 CU. FT.

CHILL CHEST
MODEL FF-150
600 Lbs
Capacity

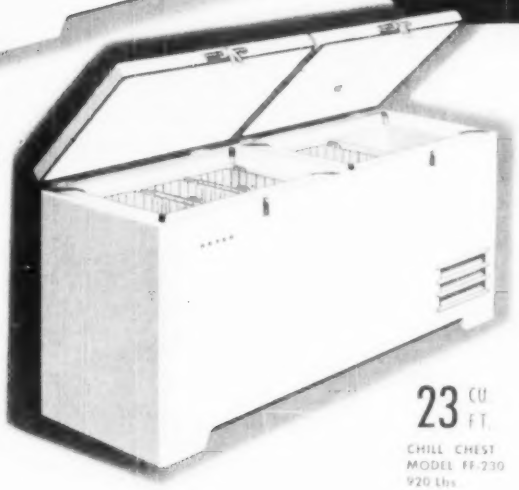
LARGER CAPACITY

IN LESS SPACE

LOWER PRICE

PER CUBIC FOOT

"The THRIFTY buy in '50!"



23 CU. FT.

CHILL CHEST
MODEL FF-230
920 Lbs
Capacity

NEW EXCLUSIVE FEATURES . . .

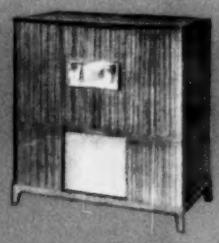
Take a look at almost any line of food freezers—they look alike, but check their storage capacity, cabinet size and features with Revco Chill Chests. Yes, You'll be amazed! Chill Chests are bigger inside to give you more food freezing and storage capacity. The Chill Chest line of 8, 15 and 23 Cu. Ft. Models compare both in price and outside dimensions with average 6, 12 and 20 Cu. Ft. freezers of other makes.

Then look at features that keep a food freezer "ticking"! Compare how fast the freezer pulls down to zero . . . check cabinet construction features that assure safe low-temperature over longer periods for most economical performance.

Chill Chest's exclusive design and proven engineering methods give you many distinctive advantages like the chip and rust-proof Aluminum Fast-freezing and Food Storage Compartment . . . Frost-Free Seal Zone that provides the perfect lid seal . . . Easy-lift Food Baskets with plastic wrapped handles. Yes, dollar for dollar, feature for feature the Revco Chill Chest line offers the THRIFTY buy in '50!

No question now as to who leads the field on LARGER CAPACITIES IN LESS SPACE or LOWER PRICE PER CUBIC FOOT in Home and Farm Food Freezers. Wire, phone or write for complete data and name of Distributor near you. Distributor inquiries also invited.

Revco INC. • DEERFIELD, MICHIGAN



MODEL 20F1 . . . 20-inch Rectangular tube. FM/AM radio . . . 3-speed phono. Limed Oak or Mahogany.

MODEL 19K2 . . . 19 inch picture tube. Limed Oak or Mahogany.

MODEL 19K3 . . . 19 inch Rectangular tube. Mahogany cabinet only.

MODEL 19K4 . . . 19 inch picture tube. Limed Oak or Mahogany.

on these two pages you see the most beautiful television sets ever created

new 1951 Motorola TV RADIO

awarded

Fashion Academy Medal

for TV's most outstanding and distinctive

Furniture Styling

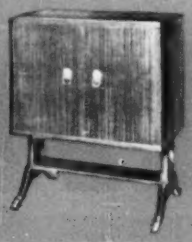
MODEL 14T3 . . . 14 inch Rectangular tube. Plastic cabinet. Low price.

MODEL 17T3 . . . 17 inch Rectangular tube. Plastic cabinet. Low price.

MODEL 17T2 . . . 17 inch Rectangular tube. Mahogany or Limed Oak.

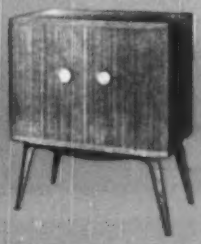
MODEL 17T1 . . . 17 inch Rectangular tube. Limed Oak or Mahogany.

MODEL 17K2 . . . 17 inch picture tube. Limed Oak or Mahogany.



MODEL 17F4 . . . 17 inch Rectangular tube. FM/AM radio . . . 3-speed phono. Rich Mahogany cabinet.

MODEL 17F3-B . . . 17 inch Rectangular tube. FM/AM radio . . . 3-speed phono. Smart Limed Oak cabinet.



MODEL 17F2 . . . 17 inch Rectangular tube. FM/AM radio . . . 3-speed phono. Walnut cabinet.

here is your TOP PROFIT LINE for 1951 . . .

. . . here is the line designed for fast turnover! The most beautiful cabinets you've ever seen . . . in mahogany, walnut, blonde oak and plastic . . . plus dozens of extra-value features for the most nearly perfect TV ever! And, the new Motorola line is backed by a tremendous national advertising campaign . . . pre-selling "style-conscious" America for you.

The new Fashion Award Motorola TV will be your top profit line! See a complete line showing at your Distributor's NOW!

DON'T FAIL TO SEE THE 1951 MOTOROLA RADIOS TOO!
The new selection of Motorola home radios offers a wide choice of distinctively styled, "eye-catcher" cabinets . . . Radios also offer a big sales opportunity this fall and winter. Don't fail to see them at your distributor's showing!

29 MODELS — A STYLE FOR EVERY HOME — A PRICE FOR EVERY BUDGET.

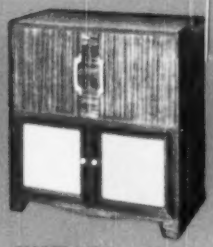
MODEL 17K3 . . . 17 inch Rectangular tube. Limed Oak or Mahogany.

MODEL 17F1 . . . 17 inch Rectangular tube. FM/AM radio . . . 3-speed phono. Mahogany or Limed Oak.

Motorola TV RADIO

MODEL 14K1 . . . 14 inch Rectangular tube. Limed Oak or Mahogany.

MODEL 17K4 . . . 17 inch picture tube. Mahogany cabinet only.



MODEL 17F5 . . . 17 inch Rectangular tube. FM/AM radio . . . 3-speed phono. Mahogany or Limed Oak.

MODEL 17K1 . . . 17 inch picture tube. Limed Oak or Mahogany.

PROCTOR

INTRODUCES NEW PRODUCTS to Step Up Your Fall Business!

Exciting new designs! Revolutionary new features! Packed with buy-appeal! Keep customers' interest in your store alive, active. To increase turnover, traffic, sales—Proctor supports these products with bang-up promotion. Big space newspaper advertising to localize operations, benefit you directly. Sound, concrete aid for dealers, built around a business-making "Best Buy Guarantee" to your customers and featuring a liberal dating plan plus other important investment insurance for you. Get full details when your Proctor representative calls. Meanwhile, study these new Proctor Products—plan your order now!

Mary Proctor CORDMINDER

Now priced lower to win more sales!

MODEL 50A
Retails at $3.95

PROCTOR CHAMPION IRON

A real featherweight, with full even heat and other sales-winning qualities!

MODEL 989—Retails at $9.95
Fed. Tax Incl.

Mary Proctor CUSTOM-FIT PAD & COVER SET

Sure-fit sailcloth cover in colors. An unparalleled sales success!

MODEL 24
Retails at $3.95

Mary Proctor HI-LO IRONING TABLE

A complete sell-out wherever it's appeared!

Now with sensational "Wheel-A-Way" for easier shifting of table. Plus other famous features that put it on top in sales in a very short time.

MODEL 60 Retails at $12.95

Mary Proctor AUTOMATIC NEVER-LIFT STEAM IRON

With METERED STEAM★ . . . IMPROVED NEVER-LIFT ACTION★ . . . STURDY, RUST-PROOF RESERVOIR★ . . . The first and only truly practical steam-dry iron combination. Packed with features and advantages that put it miles ahead of any other steam iron!

MODEL 990—Retails at $19.90 Fed. Tax Incl.

PROCTOR ELECTRIC COMPANY • *NEWSMAKER IN APPLIANCE*

does it again!

PROCTOR CUSTOM TOASTER —

New Proctor development. Toasts to preferred texture—soft, crisp or crunchy. Greatest new toaster sales feature since invention of automatic pop-up! Has Color Guard, too!

MODEL 1483—Retails at $21.50 Fed. Tax Incl.

with sensational

*CRISPER CONTROL**

PROCTOR DE LUXE TOASTER —

Unique method of toasting to desired color with most phenomenal toaster thermostat ever invented! Distinctive eye-appeal plus other Proctor-quality features. Sells fast! Sells often!

MODEL 1469—Retails at $15.95 Fed. Tax Incl.

with amazing

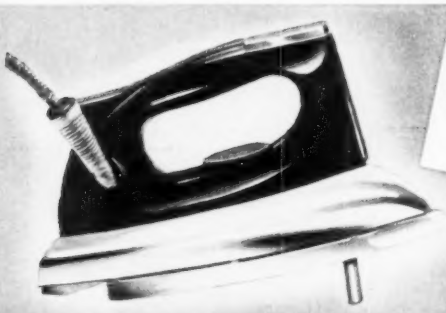
*COLOR GUARD**

PROCTOR AUTOMATIC NEVER-LIFT IRON

With improved snag-proof Never-Lift Action*. . . extra stable! One trigger control. No buttons to push. Saves lifting 2½ tons per ironing day. Ends lifting, tilting, twisting. Better than ever, more than ever, the most sought after flatiron made!

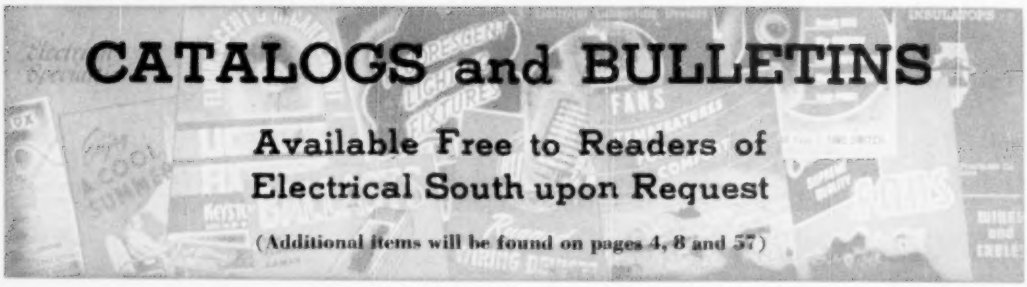
MODEL 991—Retails at $12.95 Fed. Tax Incl.

*Proctor-exclusive features sell Proctor Products!



PROCTOR®

MERCHANDISING • **3rd Street and Hunting Park Avenue, Philadelphia 40, Pa.**



CATALOGS and BULLETINS

Available Free to Readers of Electrical South upon Request

(Additional items will be found on pages 4, 8 and 57)

2004—Air Conditioning Equipment. New Bulletin No. 3158-B, "Central Air Conditioning Equipment," contains comprehensive information on this type of equipment along with charts, specifications, and maintenance instructions. The bulletin has been released by Buffalo Forge Co., P. O. Box 985, Buffalo 5, N. Y.

2010—Water Heaters. An illustrated folder describing Bell Water Heaters and the ten-year guarantee and warranty is available from Adacar Mfg. Co., Naper Field, Dothan, Ala.

2012—Room and Unit Heaters. Electromode Corp., 45 Crouch St., Rochester 3, N. Y., has announced two new catalogs, each of which contains descriptions, complete specifications, illustrations of the units, and shows typical installations, as well as other helpful information concerning heating by electricity. Catalog EC 62 is the industrial catalog, and No. EC 63 is the domestic catalog.

2014—Hot Water Heaters. Informative and well-illustrated data are available from M. M. Hedges Manufacturing Co., Inc., Chattanooga, Tenn., on their line of Mertland Automatic water heaters.

2018—Electric Fans. A 28-page, profusely illustrated booklet describes in complete detail, this company's line of fans. Booklet available from Emerson Electric Manufacturing Co., St. Louis 21, Mo.

2022—Window and Attic Fans. A four-page catalog piece completely illustrated and containing descriptive information on the new low cost "all-in one package" window and attic fans has just been released by the Viking Air Conditioning Corp., 5601 Walworth Ave., Cleveland 2, Ohio. Illustrations of automatic ceiling shutter and automatic electric timer are included.

2024—Electric Water Heaters. New specification sheets are now available for a full line of cylinder and table top models, featuring the Water Hotter, from the White Products Corp., Middleville, Mich.

2028—Fans. Catalogs Nos. 503 and 504, just issued by Chelsea Fan & Blower Co., Inc., 1200 Grove St., Irvington 11, N. J., include descriptive copy, specifications, dimensions, photographs, etc., of a full line of fans for residential, commercial, and industrial uses. These catalogs include information on 17 types of ventilating and comfort cooling equipment varying in size from 12 inches to 60 inches.

2030—Electric Fans & Drills. Signal's complete line is shown in a new catalog just off the press, featuring a wide variety of desk, pedestal, exhaust, and vent fans. Literature on drills, telegraphic equipment, and motors is also available from the Signal Electric Mfg. Co., Menominee, Mich.

2032—Electric and Gas Water Heaters. Four-page illustrated folders explain outstanding features of Fowler water heaters including porcelain lining, "black heat" elements, and 3-way insulation. These folders list specifications, dimensions, and construction details, and are available from Fowler Manufacturing Company, 2545 S. E. Gladstone St., Portland 2, Ore.

2034—Electric Flat Irons. Full information on American Beauty Electric Flat Irons in a weight, a shape, a size for household, as well as every industrial and manufacturing use, is available in literature from the American Electrical Heater Company, Detroit 2, Mich.

2038—Murray Ventilating Fans. A set of specification sheets is available describing the Murray line of fans, including 20- and 24-inch window fans and vertical and horizontal ventilating fans. H. C. Bigby Co., Inc., 177 Harris St., NW., Atlanta 3, Ga., is exclusive sales agent for the line which is manufactured by Murray Co. of Texas, Inc.

2040—Electric Blowers and Exhausters. Bulletin 5014-D describes Types "T" and "RL" Buffalo blowers and exhausters, manufactured by Buffalo Forge Co., Buffalo 5, N. Y. Characteristics of the blowers, graphic charts including capacities and static pressures, and exact dimensions are all contained in the 8-page folder.

2042—Window Fans. Miami Electric & Machine Co., Inc., 1575 E. Washington St., Indianapolis 7, Ind., have available the following catalog sheets: Form 2207, which describes and illustrates each of their five Nu-air Windofans; Form 2208, describing and illustrating three three-blade and one four-blade Nu-air Quiet Propellers; and Form 2209, which illustrates the Nu-air Windofan No. RW 240 or RW 200.

2046—Household Electrical Appliances. Dominion Electric Corp., Mansfield, Ohio, offers catalog information and detailed specifications on a complete line of table appliances, called "Family Favorites."

ELECTRICAL SOUTH,
806 Peachtree St., NE
Atlanta 5, Ga.

August, 1950

Gentlemen:

Please send me the bulletins and catalogs indicated.

(Print Plainly)

Name _____ **Title** _____

Company _____

Address _____

City & State _____

Circle numbers below. Bulletins and catalogs will be mailed promptly.

2004	2010	2012	1014	2018
2022	2024	2028	2030	2032
2034	2038	2040	2042	2046
2054	2056	2058	2064	2066
2070	2072	2074	2078	2080
2088	2090	2092	2094	2096
2098	2100	2102	2104	2106
2108	2110	2112	2114	2116
2118	2120	2122	2124	

2054—Fans. The C. & H. Air Conditioning Fan Co., Inc., 1591-1621 DeKalb Ave., N. E., Atlanta 6, Ga., have released an interesting 28-page booklet, "Cottongaire's Supreme Quality Fans." Besides showing pictures of various models, views of operations inside the plant, and specifications, there is a section devoted to methods of installation of attic fans.

2056—Radiant Heaters. Edgar L. Weagand Co., 5900 Hampton Blvd., Pittsburgh 8, Pa., has prepared a portfolio of Chromalox Radiant Heater Application Reports. In addition, the portfolio includes catalog sheets and technical data on the Chromalox "RAD" heaters.

2058—Exhaust Fans. A new Emerson-Electric Exhaust Fan catalog, illustrating and describing in detail this line of fans for all types of buildings, is offered by the Emerson Electric Mfg. Co., St. Louis 21, Mo.

2064—Electric Fans. An attractive, 8-page, 62nd Season Catalog of Zephair fans has been made available by the Hunter Fan & Ventilating Co., P. O. Box 2858, Memphis 2, Tenn. A comprehensive description of this company's products is given, with complete specifications and dimensions.

2066—Shutters & Dampers. A 12-page catalog No. 46 is available from the Elgin Shutter Mfg. Co., 2738 W. Warren Ave., Detroit 8, Mich., describing the 17 different types of shutter and dampers manufactured by them, and as used in connection with ventilating and air-conditioning installations.

2070—Zephair Fans. Hunter Fan and Ventilating Co., Inc., 400 So. Front St., Memphis, Tenn., offers a new 8-page catalog containing detailed information on the Hunter Zephair Fans, for home and industry.

2072—Reed Unit Fans. Two new 8-page booklets on unit fans have been published by Reed Unit Fans, Inc., 1001 St. Charles Ave., New Orleans 8, La. Material included in these booklets covers design, accessories and installation of the Reed window and attic fans respectively.

2074—Ventilating Fans. The complete line of C. & H. ventilating fans is pictured, with dimensions and details, in a new 24-page catalog. Described are exhaust fans, window fans, air circulators, portable and desk fans, and fan accessories such as grilles and shutters. C. & H. Air Conditioning Fan Co., Inc., 1603 DeKalb Ave., N.E., Atlanta, Ga.

2078—Sales Helps. A variety of sales helps, including Sound Slide Colored Training Films, How to Sell Booklets, Coupons, Pieces, Specification Sheets, Demonstration Kits, Display Cards and Promotion Kits for selling and demonstrating General Mills Home Appliances Pressure Quick Steam Iron Heat Iron and Steam Ironing Attachments are available to dealers from General Mills Inc., Home Appliance Dept., 1620 Central Ave., Minneapolis 13, Minn.

2080—Water Heaters. Information is available about the "SUPCO" Electric Water Heater from the Automatic Electric Heater Co., Pottstown, Pa. Literature available describes several exclusive features in the "SUPCO" line of round and table top heaters.

2088—Air Circulators. A valuable 4-complete-line folder illustrated in a four page, three color catalog sheet Form 9002 includes a wide variety of desk, pedestal, tabletop turnabout and turnabout window fans. Also available is a description folder on Vornado new turnabout, concave window fan Form 9002. The H. A. Sutton Corporation, Wichita, Kansas.

2090—Fan Blade & Battle Outfit. An illustrated catalog page describing that Knock-Down Fan Blade & Battle Outfit has been announced is available from S. J. Stewart, Electric, 77 St. Joseph St., New Orleans 12, La.

2092—Air Circulators and Window Fans. The Complete Line of Kool-Easy Model Air Circulators and Portable Window Fans for 1950 is illustrated and described in a series of two-color catalog sheets and envelope stuffers available to the trade. A Special Sales Manual containing conditions and sales information is available for use by Dealers handling Kool-Easy.

2094—Marquette Refrigerators. Information, prices and specifications are available from Marquette Appliances, Inc., 307 E. Hennepin, Minneapolis, Minnesota.

2096—Marquette Home Freezers. Vital information on Marquette's super 5-cu. ft. "Jumbo" thru gigantic 15½-cu. ft. Marquette "Super" and thru "Big Value" super 9-cu. ft. is available from the Marquette Appliances, Inc., 307 E. Hennepin, Minneapolis, Minnesota.

2098—Marquette Electric and Gas Water Heaters. Twenty-three models mean a water heater for every need. A four-page folder explains the features of the Marquette with hot, hot and not, is secured through Marquette Appliances, Inc., 307 E. Hennepin, Minneapolis, Minnesota.

2100—Marquette Electric Ranges. An individual catalog and specification sheet is available on each of the four popular Marquette range models from Marquette Appliances, Inc., 307 E. Hennepin, Minneapolis, Minnesota.

2102—Marquette Gas Ranges. Five beautiful models featuring the entire choice of an innerwarth bedecked in color and with individual specifications and catalog pages may be secured from Marquette Appliances, Inc., 307 East Hennepin, Minneapolis, Minnesota.

2104—Marquette Home Laundry Equipment—Includes Washers, Dryers, and Ironers. Four well-illustrated catalog pages that bring out the features and selling points of this popular general laundry equipment units by Marquette Appliances, Inc., 307 E. Hennepin, Minneapolis, Minnesota.

2106—Fan and Centrifugal Blowers. Catalog No. 513-B. Vital specifications, 1950 Fresh Air Makers Fans Heavy Duty Centrifugal Blowers. Attic, Portable Window, Exhaust Fans, Single and double outlet blowers. Ventilating Division Schwitzer-Cummins Co., 1125 Mass. Ave., Indianapolis, Indiana.

2108—Household Refrigerators, Laundry and Home Freezers, Electric Ranges. Complete information regarding Universal's new "Jumbo" models on the back, refrigerators, a revolutionary new combination freezer-refrigerator and automatic seven heat push-button electric ranges. White Cyclerator, Duluth 1, Minnesota.

2110—Select-A-Range. Lamers, Gary & Clark, New Britain, Conn. Eight page folder giving full information on Universal's revolutionary new Select-A-Range with the Convenience Level Oven. Illustrates various parts of range, as Roll Away Wells, Rotisserie and tells how to install it.

2112—Oil Heaters. An elaborate colorful 16 page catalog, excellent "Nesseutral Heating," describing and illustrating the complete Nesseutral line of Fuel Oil Heaters and Kerosene Heaters, is available from the National Foundries and Stamping Corp., 2000 N. 32th St., Milwaukee 1, Wis.

2114—Electric Heatures. A new colorful twelve page booklet from Model Electric Products, Inc., Buffalo, N. Y., unveils a complete line of wall attachable, wall recessed, and portable heaters. Heaters models for every room in the house, and other applications are described.

2116—Replacement Heating Units. For electric water heaters. Information on the complete line of owners wattages, voltages and styles of water heater units of the Invincible Type, can be obtained by writing to Tuttle & Kelt, Inc., Chicago 11, Illinois.

2118—Electric Fans. Robbins & Myers, Inc., Springfield, Ohio, offers an attractive, 24-page illustrated catalog covering outstanding features, design, detail, and performance ratings of R & M domestic, commercial and industrial fans for 1950. Special technical available covering new 10" and 12" 2-speed fans.

2120—Everlast Electric Homeware. Colorful literature and full information is available showing the complete line of Everlast Electric Homeware, including Roasters and their accessories, Roasterettes, Heater and Heater Fans, Rangette and Electric Blankets. The literature has specifications and is available from Swartzbaugh Mfg. Co., 1536 W. Bancroft St., Toledo, Ohio.

2122—Surface Heating Units. For electric ranges. Complete information on fitting the famous DE Monolithic Electric Range surface heating units into all types of electric ranges can be obtained by requesting the well-illustrated manual from Tuttle & Kelt, Inc., Chicago 11, Illinois.

2124—Evaporative Air Coolers. Home and commercial Evap-A-Mist Air Coolers. Company, 1000 South Fig Avenue, Los Angeles 21. Catalog 1950 Air Coolers and Accessories, complete range from 1000 CFM one room fan type units to 12,000 CFM, industrial housing coolers. Featured the "Cool-A-Bar" the Revolutionary Fan-in-Pad, completely self contained washed air cooling unit. With the further information.

"Acceptance: the act of receiving with favor or willingness," says Webster's Dictionary.

Acceptance for a familiar trade name means that people have learned to trust that name as an assurance of honest value and honest quality. An accepted trade name, therefore, is the most valuable asset a product can possess.

In America there are millions of men and women who, in the past 49 years, have learned to trust the name and the products of Kalamazoo.

DE LUXE HIGH BROILER
GAS RANGE DH-141

- Giant 18-inch Thermagic Oven with glass oven door
- Waist-high, smokeless Flame Ray Broiler
- One-Piece uniflow Top—40 inches Wide with built-in Fluorescent Lamp
- Hi-Lo, Multi-Flame Burners
- Porcelain Enameled Burner Bowls
- Cooking Interval Timer
- Convenient Utility Outlet
- Two Roomy Storage Drawers
- Titanium Porcelain Enamel Finish—smooth as glass
- Full 40 in. Wide x 25½ in. Deep x 36 in. High

America's most Beautiful

Gas and Electric Ranges

ADVERTISED IN LIFE

Refrigerators—Three 9 cubic foot models

Freezers—Four sizes: 4, 8, 12, 16 cubic feet

Washers—Four all-new models

Combination Ranges

In streamlined beauty of styling — in up-to-the-minute cooking features — in dollar-for-dollar value — Kalamazoo 1950 Ranges can't be equalled in the industry.

Nine gas models and six electrics offer a complete line in quality and pricing—from the finest deluxe models to outstanding economy values.

Proved and documented for maximum dominance and dealer profits, the Kalamazoo Line includes gas ranges, electric ranges, combination ranges, coal and wood ranges, washers, refrigerators, freezers, gas and electric hot water heaters.

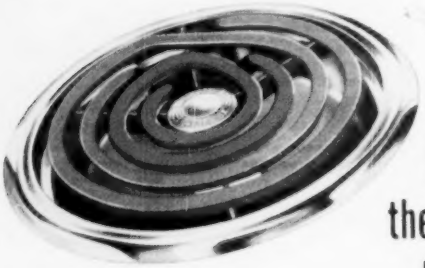
For complete information, write The Kalamazoo Stove & Furnace Co., 456 Michigan Ave., Kalamazoo, Mich.

COMPLETELY AUTOMATIC
TWO OVEN ELECTRIC E-143

- Two Big Ovens—Two Broilers
- Automatic Clock controls Oven, Utility Outlet and Surface Unit
- Chromalox Units—7 heat speeds
- Two big Storage Drawers
- One Piece Top with Lamp
- Titanium Porcelain Enamel Finish
- 40 in. wide x 25½ deep x 36 high

HOME APPLIANCES
KALAMAZOO
HEATING EQUIPMENT

LET HOT WEATHER HELP YOU SELL



Emphasize the CHROMALOX DIFFERENCE

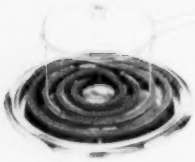
Just watch how quickly summer electric range sales are closed when you point out the "2-units-in-1" feature of any Chromalox electric range unit.

Here's heat that can be confined to small utensils in which much cooking is done.

Here's a unit that doesn't waste heat, that doesn't cook the cook, that *does make all the difference* in kitchen comfort, not only on summer days but all year 'round.

For easy hot-weather selling, emphasize this big Chromalox advantage. And point out too, that the Chromalox "2-units-in-1" design also saves up to 45% of electricity used for cooking in small utensils.

Chromalox Electric Cooking can keep kitchens 8° to 11° Cooler!

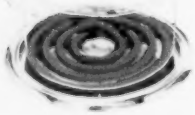


Inner Hot Spot Alone for Small Pots and Pans—

No waste heat to cook the cook

Handles stay Cooler-Can't burn

plus



Accurately controlled heat that goes evenly into large cooking utensils

For the complete story on the way to Quicker, Easier, Electric Range Sales—

Write for the valuable booklet "The Switch is On." It will help you and your men to close more electric range sales in less time.

Up and out for thorough washing. Only one part to remove.

CHROMALOX

Electric Cooking at Its Best!

EWDIN L. WIEGAND COMPANY, 7600 THOMAS BOULEVARD, PITTSBURGH 8, PA.

C. H. Rogers, 600 Peachtree St., N. E., Atlanta, Ga. J. E. West Co., Inc., Commerce St., **Dallas 1, Texas**; 602 M & M Bldg., **Houston 2, Texas**; 1311 Louisiana St., **New Orleans 13, La.**; 1819 So. Boston St., **Tulsa 5, Okla.**; W. R. Phillips, P. O. Box 2361, **Raleigh, N. C.**; W. R. Phillips, Jr., 3128 Lamb Ave., **Richmond 22, Va.**

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In the accompanying pages are the descriptions of scores of useful catalogs, application information booklets, and technical publications. These are available without charge.

Check over the list of publications available, circle the numbers of the ones you need, and mail the coupon to us with your name, title, company and address plainly written. We will tell each manufacturer to send directly to you the information you want.

•

The staff of ELECTRICAL SOUTH will be glad to help you with other problems. They will obtain expert advice for you on both technical and business problems. The services of a number of consultants are available. Whether your problem relates to sales promotion, lighting or wiring layouts, applications of the National Electric Code, or equipment application, it will receive careful attention.

•

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ELECTRICAL SOUTH
306 Peachtree St., NE
Atlanta 5, Ga.

What is all this Fast Talk about

NO DEFROSTING?

What's YOUR answer when customers ask these 5 important questions about *Automatic Defrosting?*

. . . of course, it's electric!

1. Is ALL Defrost Water Disposed of AUTOMATICALLY, so You NEVER Have To Empty Any Trays, Pans or Jars?
2. Do Frozen Foods—Especially ICE CREAM and FROZEN FRUITS—Stay Hard ALL THE TIME, Even During Defrosting?
3. Is ALL Defrosting Work Completely Eliminated? . . . ALL FROST SCRAPING, Or Melting? . . . ALL FOOD REMOVAL Before Defrosting?
4. Does "NO DEFROSTING" Apply to the FREEZE CHEST—the ONLY Place Frost Builds Up?
5. Does Defrosting Occur ONLY WHEN Your Refrigerator Needs It?

GET THE FACTS AND YOU'LL AGREE THAT ONLY THE *NEW*

Westinghouse FROST-FREE* REFRIGERATOR

CAN ANSWER "YES" ON ALL 5 QUESTIONS!

YOU CAN BE SURE..IF IT'S Westinghouse

*TRADE MARK

Westinghouse Electric Corporation • Appliance Division • Mansfield, Ohio

JUST PUSH THE BUTTON

to put these powerful forces to work in your company

Right now management has an unusual opportunity to gain employee-relations value from the high public interest these genii have created for U. S. Savings Bonds. During the Treasury Department's Independence Drive, May 15-July 4, every major advertising medium has been used to broaden the people's interest in Savings Bonds as a means of building financial independence. Now, more than ever, as a result of this all-out campaign, your employees will appreciate the convenience of being able to obtain Bonds "automatically" via the Payroll Savings Plan.

If your company doesn't yet have the Payroll Savings Plan, now's the most opportune time for you to install it!

If your company does have the Plan, now's the time to remind employees about it!

Employees who pile up money in Savings Bonds feel more secure . . . are actually better workers. Moreover, Bond sales build a backlog of future purchasing power—good "business insurance" for all of us in the years ahead.

Payroll Savings is good for your employees, your business, and your country. "Push the button"—call in one of your top executives and appoint him Savings Bonds Officer. All the material and assistance he may need are available from your State Director, Savings Bonds Division, U. S. Treasury Department.

The Treasury Department acknowledges with appreciation the publication of this message by

ELECTRICAL SOUTH

This is an official U. S. Treasury advertisement prepared under the auspices of the Treasury Department and The Advertising Council.

CLINCHING THAT SALE

An unusual series of demonstrations of how to sell more electrical appliances features "sales strategy seminars" held by Electric Institute of Washington

by Lee Salsbery

◆ A SALESMAN must be an expert authority on his product, able to present the features of the product to the prospective customer and to answer any question about the product the customer may ask. Even more important is his ability to make good the opportunity to display his wares and sell them.

Before ringing that doorbell the alert salesman will observe which way the door will open and be prepared to make a good impression.

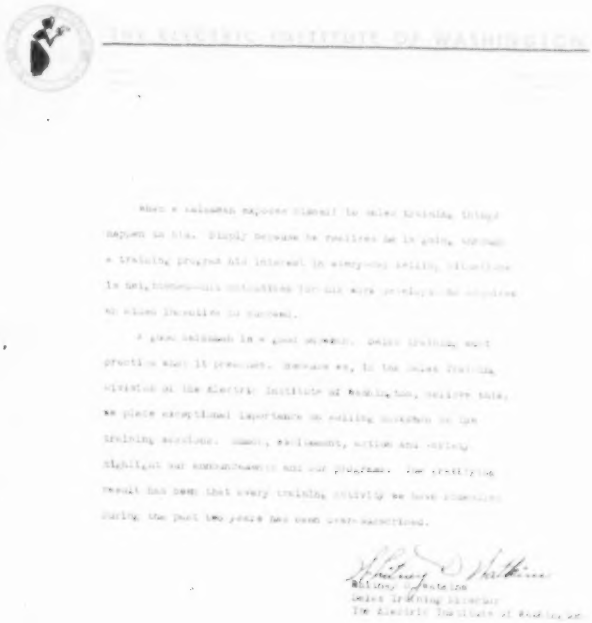
He must be immaculate in clothes of good taste, courteous and respectful—but not ingratiating—and able to cope with any situation.

The salesman loses his opportunity for a sale in the first round if he fails to get an interview. The importance of that first good impression cannot be overestimated.

The first 30 seconds may make or lose a sale and a prospective customer. A sale often depends on small indefinable points that are not realized by the customer, such as the choice of words in the greeting.

The salesman need not be an actor, but if he is genuinely sold on his product and knows that it is the best, his every word and action rings true. He must be convincing.

Sure confidence, not cockiness, is based on thorough knowledge of one's product, command of words—those simple powerpacked phrases that carry weight—and a sympathetic understanding of human nature.


THE ELECTRIC INSTITUTE OF WASHINGTON

When a salesman expects himself to make training things happen to him. Study because to realize he is going, through a training program his interest in everyone selling situations is key, [illegible] situations for his own products he expects to make themselves to succeed.

A good salesman is a good student. Sales training must practice what it preaches. Because so, in the sales training situation at the Electric Institute of Washington, believe sales, we place exceptional importance on selling situations in the training sessions. Sales, enthusiasm, action and selling skills are contagious and our program. The results have been that every training activity we have conducted during the past two years has been over-subscribed.

Whitney Watkins
Whitney Watkins
Sales Training Director
The Electric Institute of Washington

The letter above from Whit Watkins, sales training director of the Electric Institute, shows one reason why there was such enthusiasm in this sales training course on the part of the salesmen — equal enthusiasm on the part of the Institute. The picture story on the following pages is one of three to appear in ELECTRICAL SOUTH on the basic fundamentals of selling presented in this course. Mr. Watkins' and the Institute's cooperation is appreciated.

1. Our salesman finds the lady of the house in and proceeds to make a bad impression by his unkempt appearance and discourteous manners.

The importance of a proper introduction cannot be overstressed. The first impression one makes is often the last impression.

2. Probably more by luck than by salesmanship our salesman has managed to barge in and is volubly explaining, with his canned talk, the features of his product, while the bewildered housewife asks if it will clean animal hairs. The crowning insult in this case is the salesman's failure to remove his hat.

It is as important inside to be neat, courteous, and polite as it is on the doorstep.

▲ **DON'T**

▲ **DON'T**

DO ▼

DO ▼

1. Presenting a card, our charming salesman makes a good impression.

It is always a good idea to give the housewife warning by card or telephone call to let her know that you will be in the neighborhood shortly. In addition to courtesy the notice paves the way for his personal calling card, as shown.

2. Hat removed, the salesman shows the housewife the advantages of his product as they engage in interested discussion.

A good approach makes the middle ground much easier for the final sale.

3. By now both our salesman and the prospect are fully engaged in the process of the demonstration, with obvious reluctance by the housewife. Ignoring her question, he proceeds to show her how well it removes dirt which he himself brought in, much to her dismay.

The sales story must be tailored to the occasion. When the prospect offers a lead the salesman should always follow through with the explanation.

DON'T

4. Here he is back on the steps again, no sale made, wondering why the canned speech (note can) didn't work.

Prepared salesmanship is fine, in fact necessary, but a completely canned speech, which allows no deviation or improvement, is the downfall of many a good salesman.

DON'T

DO

3. Having been asked if his product will remove dog hairs, the salesman proceeds to show his special dog hair remover in operation.

A good salesman jumps at an opportunity to show his product in use, deviating if necessary from his prepared talk.

DO

4. Everybody is happy. The housewife has a brand new vacuum cleaner, and the salesman has a brand new contract.

'Nough said.

Narda's 1949 Survey on the

COST-OF-DOING-BUSINESS

Fourth annual national cost study for the appliance and radio-television retail industry

◆ NARDA DEALERS participating in the Association's fourth annual costs-of-doing-business survey who gave comparative dollar sales and profit figures for both 1949 and 1948 experienced a 4% drop in dollar sales volume in 1949 by comparison with 1948 and at the same time suffered a 31% decline in dollar profits. This was the "average" or "composite" result for 70% of all the dealers reporting, washing out the usual wide variations among the individual dealers.

In 1948, sales were 12% above 1947, and, in 1947, sales were 43% above 1946. The 1949 drop of 4% from 1948 may or may not represent the culmination of the postwar appliance market honeymoon.

The NARDA dealer sales drop of 4% from 1948 compares with a decline of 2% in total U. S. retail trade volume and a decline of 1% in total U. S. sales of all durable goods stores. The home-furnishings stores segment of the durable goods trade showed a decline of 5% in 1949 sales by comparison with 1948. (This group includes furniture stores as well as household appliance and radio stores.)

The percentages of change cited in the preceding paragraph for total U. S. retail trade, durable goods stores, and home-furnishings stores were based on Department of Commerce estimates of dollar sales for 1949 thrown against newly available figures from the U. S. Census of Business for 1948.

Dollar sales increases for 1949 were shown by 38% of the dealers participating in the survey, while sales declines were reported by 62% of the dealers. In 1948, 66% of the dealers showed increases over 1947 and 34% showed declines.

Net dollar profit was shown by 87% of the dealers in 1949 against 86% in 1948. Conversely, net dollar losses were shown by 13% of the dealers participating in the 1949 survey while such losses were reported by 14% of the dealers covered by the 1948 survey. (The 13% of the dealers showing net losses in 1949 included large dealers whose losses contributed heavily to the 31% decline in dollar profits for the 70% of the dealers mentioned previously.)

The number of participating dealers was approximately the same in 1949 as in 1948.

TV Rises to Third Place in Sales

The most significant development in the merchandise sales structure of the NARDA dealers participating in the 1949 survey was the emergence of television sales as a major factor. Whereas television sales accounted for

TABLE 1

Appliance Sales Breakdown by Product Type

Appliance	Percent of Total Sales 1949	1948	1947	1946
Total	100.0	100.0	100.0	100.0
Refrigerators	27.8	28.6	24.0	19.0
Washing Machines	14.1	16.9	18.0	14.0
Television	11.3	4.4		
Ranges	10.0	12.2	13.0	13.0
Radios	7.2	7.8	17.0	17.0
Vacuum Cleaners	1.7	1.4	3.0	3.0
Other Sales	25.9	28.7	25.0	33.0
Freezers	3.1	2.5		
Ironers	1.6	2.0		
Dishwashers	1.0	1.6	not	
Other Major Appliances	12.5	15.8	tabulated	
All Small Appliances	9.1	9.8		

TABLE 2

Percent of Total Sales of Each Item Involving a Trade-in

Appliance	Trade-in % of Total Sales 1949	1948	1947	1946
Refrigerators	35	18	11	3
Washing Machines	41	27	19	4
Ranges	20	16	9	2
Vacuum Cleaners	31	22	26	10

This article is adapted from a copyrighted report prepared by Richard E. Snyder, consulting economist of Chicago, for the National Appliance and Radio Dealers Association, and is published by permission of the Association.

only 4.4% of the total reported in 1948, the video sales in 1949 represented 11.3% of the total. This put television in third place, displacing ranges which were third last year. Refrigerator sales were at the top of the list in per cent to total and washing machines were second. This has been the usual pattern, but the percentage in each case was somewhat lower in 1949 than in 1948. Radios slid slightly, percentagewise, in 1949, and this was also true of ironers. Vacuum cleaners and freezers increased their share of the sales pie a bit in 1949, while dishwashers held even with 1948. See Table 1 for detail.

It should be remembered that a drop in a given product's per cent to sales total does not necessarily reflect a decline in actual sales volume of that product.

- **Dollar sales and profits of most dealers declined in 1949**
- **Television sales in 1949 rose to third place in per cent to total sales reported**
- **The trade-in ratio to total sales of four key products increased sharply in 1949, continuing the rising trend of trade-ins since 1946**
- **The average NARDA dealer's net profit ratio to net sales in 1949 rose to 5.2% from 4.6% in 1948**
- **A drop in the cost of goods sold ratio in 1949 was the main reason for the profit ratio rise**
- **Gross margin was higher in 1949 than in 1948**
- **Total Operating costs increased again in 1949, for the third straight year**
- **Service operations expanded again**
- **The average dealer turned his inventory 3.8 times in 1949**

Sharp Increase in Trade-ins

As is indicated in Table 2, there was a marked expansion in the degree to which trade-in transactions accompanied sales of refrigerators, washing machines, ranges, and vacuum cleaners in 1949 by comparison with 1948. The rising trend of the trade-in ratios is a rough indicator of the rate at which the industry is emerging into a "replacement" market from one in which population growth, new family formations, and new residential building activity were dominating factors in stimulating "new" demand.

Supplementary information gathered from dealers in June 1950 indicates that the high trade-in ratios to sales experienced in 1949 are present in the current year as well.

The 1949 survey schedule called for dealer figures reflecting dollar values of merchandise inventory held at the beginning of 1949 and at the end of the year. This element was not measured in previous surveys. Analysis of the figures reported by the participating dealers indicates that the dollar value of merchandise inventory held by the "average" dealer at the end of 1949 was 16% below the dollar value of his inventory at the beginning of the year.

TABLE 3

National Operating Cost and Profit Ratios, 1949-1948-1947-1946

Line	Item	National Averages 1949	1948	1947	1946
1.	Net Sales*	100.0	100.0	100.0	100.0
2.	Cost of Goods Sold**	67.2	68.1	67.0	66.1
3.	Gross Margin (Line 1 minus Line 2)	32.8	31.9	33.0	33.9
4.	Total Operating Costs (A thru E)	27.6	26.5	26.2	25.4
	A. Administrative	19.1	18.0	18.2	18.0
	(1) Owners' and/or Mgrs. Salaries	3.3	3.3	NS	NS
	(2) Office Salaries	2.9	3.8	NS	NS
	(3) Salesmen's Pay	5.5	5.5	4.8	4.8
	(4) Service Men's Wages and Expenses	4.2	4.2	4.4	3.5
	(5) Delivery Expense	1.1	1.1	NS	NS
	(6) Other Administrative Expense	1.7	1.4	NS	NS
	B. Occupancy Expense	2.6	2.8	2.0	2.7
	C. Advertising Expense	2.5	2.0	2.4	1.9
	D. Bad Debt Losses	0.2	0.2	0.2	
	E. All Other Expenses	3.2	2.6	2.7	1.8
5.	Net Operating Profit (Line 3 minus Line 4)	5.2	4.6	6.8	8.5

* Includes revenue from service.
** Includes cost of service parts and supplies.
NS: Not segregated in 1947 and 1946 survey schedules.

Collection of the inventory data mentioned in the preceding paragraph made it possible to compute, for the first time, a year's merchandise inventory turnover rate for the dealers. This computation showed an average merchandise turnover of 3.8 times in the year. There were wide variations from this among the individual dealers. Inventory turnover rates for dealers in four different sales volume classifications and in four geographical areas are presented later in this report.

Sales vs. Selling Space

One rough measure of retail selling efficiency is obtained by relating the dollar sales volume to the physical amount of selling space in the store. The 1949 survey schedule called for floor area figures reflecting the number of square feet of selling space. A large majority of the respondent dealers entered this information and thus it was possible to determine that the "average" dealer's sales per square foot of selling space amounted to $73.20 in 1949.

Higher Gross Margin

Table 3 presents the national cost and profit ratios which reflect the average experience of all the NARDA dealers whose operations were covered by the Association's surveys for 1949, 1948, 1947, and 1946. A detailed discussion follows the table.

It was pointed out in the initial paragraph of this report that 70% of the dealers reporting comparative dollar sales and profit figures for both 1949 and 1948 in this survey averaged a 4% decline in dollar sales and a 31% drop in dollar profits in 1949 by comparison with 1948.

When we follow the procedure of relating the dollar figures for the various operating elements to net sales in terms of percentages thereof, we can discern certain developments which might be obscured by straight percentage comparisons of one year's results with those of the preceding year. We note, for example, that whereas there was a 31% decline in actual dollar profits in 1949 for most of the dealers, the **profit ratio** to net sales in 1949 for all participating dealers was higher than in 1948: 5.2% against 4.6%. At the same time, total operating costs were higher in 1949 than in 1948: 27.6% of net sales against 26.7%. Thus we must look for some other element in the picture to explain the rise in the **profit ratio** for the whole reporting group. We find our explanation in the fact that **cost of goods sold** showed a decline in 1949 from 1948. This factor amounted to 67.2% of net sales in 1949 against 68.7% in 1948. Accordingly, gross margin, which is the difference between net sales and cost of goods sold, was larger in 1949 than in 1948 (32.8 vs. 31.3). The increase of 1.5 points in gross margin in 1949 more than offset the increase of 0.9 point in total operating costs, thus producing the higher net profit ratio for the year. The increase of 0.6 point in the net profit ratio for 1949 is equal to the difference between the increase of 1.5 points in gross margin and the increase of 0.9 point in total operating costs.

It is to be concluded from the foregoing that, had there not been a drop in the cost of gods with its natural accompaniment of a rise in gross margin, the average dealer's net profit ratio would have shown a decline from 1948 inasmuch as he sustained a larger total operating cost.

Special Analysis of Servicing

The structure of the NARDA cost-of-doing-business survey schedules in each of the past four years has called for the inclusion of revenue from service operations in net sales, and the inclusion of cost of service parts and supplies in cost of goods sold.

The service operation has increased in importance from year to year and, because of the possible distortional effect of this factor on the dealer's gross margin ratio, it becomes desirable to determine what the gross margin would be on merchandise only.

Analysis of 1949 reports indicates that gross margin on merchandise only was 31.2 per cent while gross margin on merchandise and service was 32.9 per cent. In 1948, the corresponding figures were 29.8 per cent for merchandise only and 31.3 per cent for merchandise and service. In 1947 the gross margin on merchandise only was 32.2 per cent and the margin for merchandise and service was 33.0 per cent.

Thus in each of the past three years, the gross margin on merchandise only has been less than the gross margin on merchandise combined with service.

It will be to the advantage of any dealer with a service operation to know the degree to which this operation affects his total gross margin. A separate gross margin ratio should be derived for merchandise only. This automatically excludes the influence of service revenue and costs of service parts and supplies. Negotiations involving trade discounts on merchandise require that this be done, if a true picture is to be had.

Analysis by Size of Dealer

As was the case with the NARDA Costs-of-Doing-Business Survey report for 1946, 1947, and 1948, this report applying to 1949 operations provides separate tabulations of income and profit ratios for four specific dealer sales volume classifications. This refinement of the survey figures makes it possible for the individual dealer to compare his own ratios with the averages for others in his store size group. The basis of the store size groupings is as follows:

Group A—Dealers with net sales above $250,000.

Group B—Dealers with net sales between $150,000 and $250,000.

Group C—Dealers with net sales between $75,000 and $150,000.

Group D—Dealers with net sales below $75,000.

Chief results of 1949 operations for dealer sales volume classifications are shown below:

Group	% Change in $ Sales 1949–1948
A	3.4
B	11.1
C	0.6
D	15.6
Nat'l	4.1

Group	% Change in $ Profits 1949–1948
A	29.1
B	50.9
C	27.7
D	65.6
Nat'l	30.0

1. All four groups had percentage declines in dollar sales and dollar profits.

It will be noted that the largest declines in sales were accompanied by the largest declines in profits, irrespective of dealer size.

2. The largest dealers registered the heaviest dollar sales per square foot of selling space.

Group	$ Sales Per Square Foot
A	$100.00
B	69.80
C	55.64
D	41.00
Nat'l	$ 73.20

3. The biggest dealers turned their inventory the most times.

Group	Turnover Rate
A	5.1
B	3.5
C	2.5
D	1.6
Nat'l	3.8

In order to further implement the individual dealer's application of the operating ratios as a practical management tool, the survey results are broken down by four grand geographical divisions. The states included in these four regions are shown at the bottom of Table 4. Detailed breakdowns of the operating and profit ratios for the four geographical divisions are shown in the table for 1949 as well as for previous years back to 1946, where the information is available.

Dollar sales and dollar profit comparisons between 1949 and 1948 for the four geographical groups show a variety of results, as indicated in the following tabulation:

Region	% Change in $ Sales 1949–1948
I	3.4
II	13.3
III	8.7
IV	10.0
Nat'l	4.4

Region	% Change in $ Profits 1949–1948
I	9.0
II	29.9
III	41.5
IV	51.5
Nat'l	31.0

It will be noted that dollar sales in only one region (I) showed an increase in 1949 over 1948 and that, whereas dollar profit declines were shown in all four regions, this same region had the smallest such decline.

New data on merchandise sales per square foot of selling space and merchandise turnover rates were collected in the 1949 survey for the first time. The findings relating to these factors for the four geographical groups are shown below:

Region	$ Sales Per Square Foot
I	$85.38
II	70.09
III	73.81
IV	62.98
Nat'l	$73.20

Region	Turnover (No. of Times)
I	5.2
II	2.8
III	4.3
IV	4.0
Nat'l	3.8

Table 4 is deserving of careful study for it reveals many interesting trend changes and intergroup performance comparisons. Following are the highlights:

Region III was the only one to show a higher cost of goods ratio to net sales in 1949 than in 1948, but this should be taken advisedly inasmuch as data for this region were not as complete as for the other three.

Region IV showed the highest gross margin ratio in 1949 as well as the highest total operating cost ratio. Oddly enough, these two results often go together. It could be that dealers who do the most efficient buying job also expend the most energy (and money) in their selling efforts.

Among the major expense ratios, Region III was highest in Administrative, while Region IV was highest in Occupancy, Advertising, Bad Debts, and "All Other" expenses.

Region I had the highest net profit ratio in 1949, followed by Region II, Region IV, and Region III, in order.

TABLE 4

Operating Ratios by Geographic Divisions

[illegible]

Contact the public —
make it easy for them to buy!

Reaching More Prospects

by Robert A. Latimer

◆ Eliminating completely all of the disagreeable features and sales-killing drawbacks in heavy-volume appliance merchandising is the purpose of a novel new sales program, which has been developed by Henry D. Keeler, major appliance buyer for Maas Bros., appliance dealers in Tampa, Fla.

When major appliance sales began to fall off slightly in 1949 through the Tampa area, as was true of most of the country, Mr. Keeler determined to do something about it. Recognizing the fact that the halcyon days of "come and get it" in appliance selling were gone, he took a realistic approach to the problem of maintaining a profitable appliance volume, with less money flowing through spending channels, and a considerably more bargain-minded atmosphere where the customer was concerned.

What we felt was necessary was some sort of sales system which would reach more prospects, produce more sales, without the use of excessive markdowns or trick promotions of any kind," Mr. Keeler said. "After a lot of study, we have come up with what we feel is the ideal plan."

The Tampa appliance retailer, surprisingly, maintains a crew of no less than 40 outside salesmen, all of whom are paid on a straight commission basis, as selected by the men themselves. Except for two or three permanent salesmen on the floor, there is no such thing as assigned floor time for any of the 40 outside specialists.

While a salesman may, if he wishes, spend a few hours per week on the salesfloor, most of them have found it individually far more profitable to be out on the street, and therefore, the huge sales crew is on the job in prospects' homes, six days a week.

Using this abundance of salesmen, and providing all with a proper amount of leads, plenty of enthusiastic support, Mr. Keeler has found, has done away with the first drawback—that of insufficient contact with homeowners in their own surroundings.

Next, in order to build up his staff of 40 salesmen, the Tampa appliance buyer has hit upon another clever plan—in this case to do away with the difficult problem of obtaining a well-balanced crew of new salesmen.

"We have found it constantly a problem in the past to hire new salesmen and keep them on the job," Mr. Keeler said. "For example, a few weeks ago, I interviewed 70 men, from whom we were able to find only five actually interested in appliance merchandising, and two ready for immediate hiring.

"To do away with this hesitation, which is invariably founded upon the fact that the salesman must wait too long for his first check, we have made a simple change—which is to pay all of our salesmen on a weekly basis. Instead of paying them once a month, all accumulated commissions are now divided into a weekly schedule, equal amounts per week, and the specialty salesman receives a weekly paycheck just as does the average worker.

"This, surprisingly, works out fine — the salesmen appreciate their money coming in more even amounts in this way, and the new salesman, on the job only a few days, will start receiving checks as soon as his first commission becomes due.

"In other words, the plan makes it possible for us to keep a salesman on the job during the first difficult period of 30 days, during which he is almost certain to receive four checks. After that, the salesman's earnings are usually adequate to keep him on the payroll."

Next, Mr. Keeler tackled the all-important problem of supplying a constant flow of prospects for his 40-man sales crew. Instead of resorting to stunt promotions, cold canvassing, or other such arduous efforts, he has put the entire job in the hands of a pleasant-voiced telephone saleslady.

(Continued on page 90)

The Maas Brothers plan in a nutshell:

1. *Loanouts of appliances*
2. **Advertising coupons**
3. *Weekly commission checks*
4. **No assigned floor time for salesmen**
5. *Yearly telephoning schedule on previously sold customers*

TRIPLE-DUTY TRUCK

. . Demonstrations increase sales of television service and equipment, give customer best possible reception

◆ SALES HAVE skyrocketed for Electro-Crafts Television, Kansas City, Mo., through use of an unusual truck that does triple duty as a repair-shop-on-wheels, delivery truck, and advertising medium.

Television and radio sets are repaired right at their owners' doors with tools, parts, and testing equipment carried by the truck. New television sets are delivered by the truck, and antennas are installed with the aid of an extension ladder mounted on the truck roof and a 40-foot telescopic antenna.

The company's sales and service facilities are advertised through a public address system while the truck is on the road. Microphone and controls for the public address system are in front of the driver's seat.

Charles T. Owsley, president of Electro-Crafts, constructed the unique business-builder in a Dodge Route-Van delivery truck. One important feature of the truck with its seven-foot body providing 253 cubic feet of load space for repair equipment and merchandise is that it has fluid drive to protect sensitive television sets from jolts and jars.

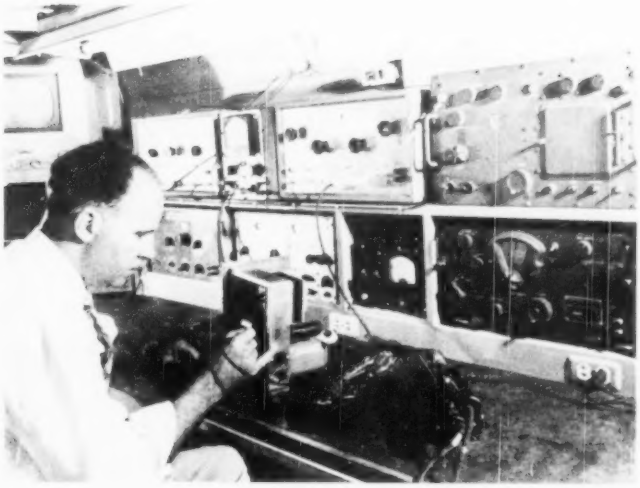
Mr. Owsley built parts drawers and tool cabinets on the right wall of the body. On the left wall he installed a work bench with electrical outlets, 110-volt auxiliary generator, television monitor screen, and testing equipment.

The telescopic television antenna, one of the company's most potent sales aids, is mounted on the truck floor and extends through the roof. The antenna can be turned in any direction and raised to any height up to 40 feet to find the best position for reception in any area.

Television sets are loaded and unloaded through the rear doors which are more than 38 inches wide. The low floor at the back—less than 18 inches from the ground—permits the cabinets to be handled without being jolted

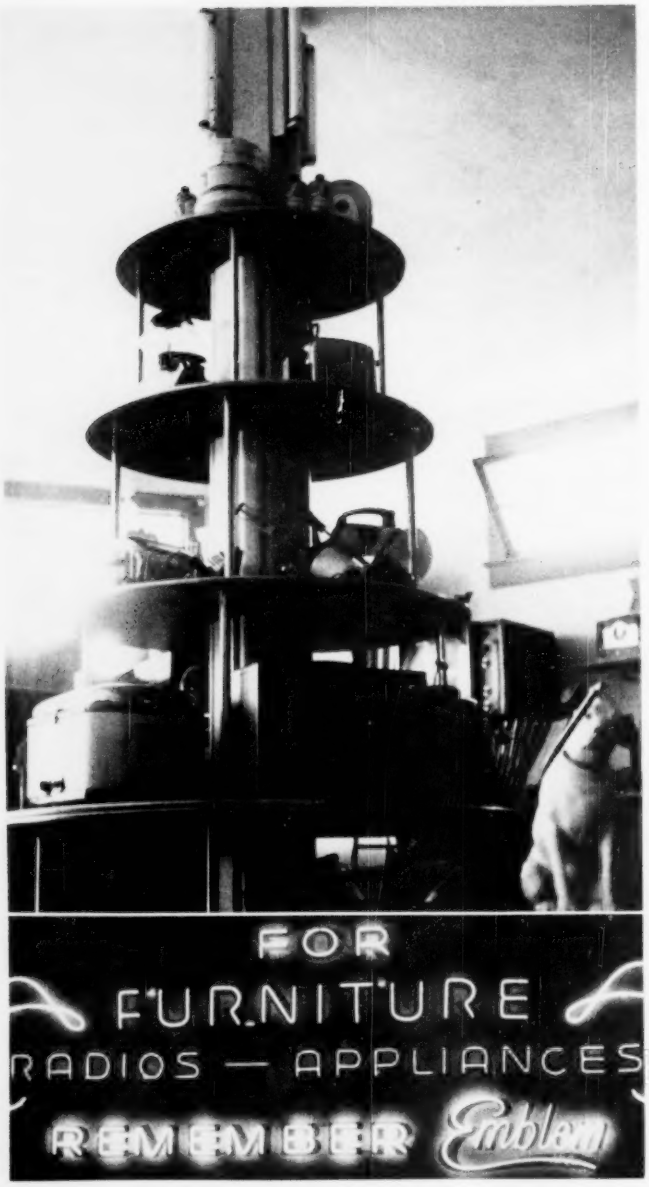
(Continued on page 92)

This combination repair-shop-on-wheels, delivery truck, and advertising medium contains an auxiliary generator which provides 110-volt ac for the television repairman's soldering iron and testing equipment.



Outside solicitations pay for themselves. put new accounts on the books . .

HOUSEWARES ARE LEADERS



◆ TODAY many appliance dealers do as much of their selling—and sometimes more—in the customer's home as they do in their stores. And in nearly every case, outside selling is confined to the "big ticket" major appliances. But down in New Orleans, it is not at all unusual to see a salesman getting into his automobile in front of one of the two Emblem Appliance Stores carrying a waffle iron, toaster, steam iron, or electric clock under his arm.

Lester Martin, appliance sales manager for both Emblem stores, has found that outside selling of electric housewares is well worth while.

"The real importance of outside selling of electric housewares is that they make good leaders," he says. "I do not mean cut price leaders. Rather, they are account openers. They get new names onto our books."

Securing accounts, however, is not the whole story of what electric housewares sales mean to the two Emblem appliance stores. One dollar out of eight or 10 that the store takes in comes from the sale of these housewares. That figure looms large in view of the fact that the price ticket on an average major appliance is perhaps 15 to 25 times the price of the average electric houseware.

"Most appliance dealers," Mr. Martin says, "make their strong efforts toward closing sales of

•

(Top) An effective island display in one of the two Emblem stores in New Orleans sets off a variety of electrical housewares. Note the neon tubes set vertically at the top of the display for further emphasis. (Bottom) The brilliant neon sign stops foot traffic and draws attention to the windows of the Emblem Gentilly store.

by David Markstein

the big ticket appliances, and leave it to the customers to discover electrical housewares on their stores' display counters. But we have found fine profit possibilities in electric housewares if you really go after the sales—and we do."

When several new salesmen have been trained, the two stores will have eight men working on the outside, four inside the Gentilly store, and three inside the Oak Street store. The eight men will go out frequently to answer inquiries and follow leads for electric housewares.

"When people phone in or ask questions about electric housewares we have advertised, we make a strong effort to follow up these leads outside the store, just as we would do with a prospect for a refrigerator, television set, or other big ticket appliance," Mr. Martin explains.

(Right) Emblem salesmen take electrical housewares along when they make outside calls. In addition to providing profitable sales, according to Emblem, outside selling of housewares puts accounts onto the books, and makes possible many sales of big ticket appliances. (Below) The Gentilly Road Emblem store utilizes wide parking space in front and on the side street. The outdoor sign can be seen from blocks away in either direction.

"We had to answer an important question before we decided to pursue this policy. We knew that outside selling of major appliances was profitable. But would the cost in salesmen's time and other overhead eat up any profit to be made from electric housewares if we sold them in the customers' homes as well as inside the stores?

"We now have an answer to that question. Our experience has shown that it pays us in two

(Continued on page 87)

Selling terms instead of merchandise is forcing the dealer to compete with easy-pay plans

THE CREDIT PROBLEM

by L. H. Houck

◆ WITH RECORD-BREAKING sales volume in view in houses, cars, television, radio, furniture, washing machines, refrigerators, and all electric appliances, the "easy credit" bird is hovering over the profit prospects.

Banks and finance companies as well as individual merchants are watching closely the tendency in the present market to sell terms instead of merchandise. The prewar nothing down and the extension of ordinary 18 to 24 months credit to 36 months and longer is appearing on the merchandising horizon along with newly developed credit schemes.

All of this amounts to additional competition for the average appliance dealer, who must now compete for the customer and then often compete with a dozen easy-pay plans which have been offered.

This article has been compiled to show what appliance sales prospects are, what is taking place credit-wise in scattered precincts over the country, and to re-state the principles of successful business that every merchant knows.

The Federal Reserve Board in a recent report states that there is a good chance for record sales in appliances during the next 12 to 18 months. They report that buying plans for washers, refrigerators, television sets, radios, automobiles, and houses on the part of the general public is as great as it was a year ago. They base this statement on a survey they conducted to learn what people intended to buy next year.

How well these buying plans can be carried out depends on what happens to jobs, incomes, the availability of goods, and credit. The Board said more than three families in 10 were spending more than their incomes and that the financial position of families or buying units was slightly weaker.

The U. S. News and World Report recently stated that family gadgets were dominating the

Jack Boring's easy-pay plan has much to catch the eye of the customer. It starts out with no down payment, and insurance pays off the balance in case of unforeseen events.

Macy's credit plan is new and simple to use.

Tucker tells his customers that he'll treat them right in sickness and during loss of employment, but no give-aways, and no abandonment of time-honored principles of time-payment business.

sales picture and that factories would have to put on extra shifts to produce the merchandise demanded. It pointed to television which has become a billion-dollar-a-year industry almost overnight as but one item.

They give the reason for this unprecedented demand. Families in the last 10 years have increased 24 per cent while population has increased but 15 per cent, which indicates that family growth has been 60 per cent greater than population growth. Families are, of course, the great group of customers of the appliance dealer. Investigators state that family growth will be 18 per cent in 1960 while population will increase but nine per cent.

This outlines the future market for the merchandise that electrical appliance dealers have to sell.

As the family income either goes down or its buying goes up, whichever happens to give its spending the higher ratio, credit terms will be subjected to more pressure.

The temptation to weaken credit terms and make the sale in the hope that the customer can make the payments if they are stretched out long enough will be increasingly present in all deals. In addition, more customers will be prepared to quote the easier

(Continued on page 89)

BUSINESS AIDS

"Establishing and Operating" series of booklets available from U. S. Department of Commerce

by E. P. Danese

Business Specialist,
U. S. Department of Commerce
District Office,
Jacksonville, Fla.

◆ "WHY KEEP a lot of complicated records? I can see what's going on in my business. I'm here every day. Anyway, I'm so busy running my store I don't have time for keeping records. Besides, I don't know anything about it."

This is the view often expressed by operators of small retail establishments when the subject of record keeping or more efficient management is discussed.

There are several things wrong with this view. In the first place neither a large number of records nor complicated records are necessary. Secondly, if the average small-store retailer is so well posted on the conditions of his business, through his intimate daily association with it, why is it that so many of the unsuccessful and bankrupt retailers are found to have had poor records or no records at all?

Most of the careful observers of business failures hold that the one most important factor is that which is often taken for granted or practically overlooked—competence of management. Included in this attribute is the keeping of proper records.

This competence, they further conclude, is not something just inborn that "either you have or you haven't," though native abilities figure in it. Management skills, it has been found, can be largely acquired.

Let's review a United States Department of Commerce report, based on a study made some years ago, covering failures of 30 retail establishments.

Of the 30, it was found that 21 never made up a profit-and-loss statement or balance sheet. Four never took inventory. Nine said they did not know how to figure stock turn. One had allowed members of his family of seven to take money indiscriminately from

(Continued on page 90)

Typical Booklets Available

Establishing and Operating Your Own Business	15c
Electrical Appliance and Radio Shop	15c
Variety and General Merchandise Store	50c
Heating and Plumbing Business	30c
Bookkeeping Service for Small Business	15c
Record Keeping for Retail Stores	15c
Financial Considerations in the Establishment of a New Small Business	15c
Selecting a Store Location	20c
Distribution Cost Analysis	15c
The Small Business Man and His Bank	10c
The Small Business Man and His Financial Statement	15c

News Roundup

Air Conditioners Pushed in Ads

◆ CAPITOL DISTRIBUTORS, Inc., Dallas appliance distributor, has sponsored what is believed to be one of the biggest concentrated newspaper advertising efforts ever made on behalf of room air conditioners.

On Sunday, May 21, Capitol, Dallas area distributors for Remington Electric Room Air Conditioners, ran a special 6-page section in the *Dallas Daily Times Herald* entirely devoted to Remington news and advertising.

Sixteen retail dealers were represented with individual advertisements in this section, using space units varying from a full page down to small one-column and two-column ads for smaller dealers in outlying areas.

Sales results on the retail level were immediate and highly satisfactory, according to E. A. Bonneville, general sales manager for Remington Air Conditioning Division of Remington Corp., manufacturers of the units, who stated that now, three weeks later, the effects of this concentrated promotion were still being strongly felt by all Remington dealers.

"Capitol Distributors agree with us," said Mr. Bonneville, "that the section was far more valuable than the same number of ads scattered in regular editions. The carefully written news type stories really 'sold' the benefits of room air conditioning to the reader, and the adjacent ads served to amplify their effect and direct the customer to the dealer."

1950 Washer Sales Pass 2,000,000 Mark

◆ THIS year's factory sales of household washers passed the 2,000,000 mark in July, according to preliminary figures for the period announced recently by H. P. Nelligan, president of the American Home Laundry Manufacturers' Association and head of the Easy Washing Machine Corporation, Syracuse, N. Y.

Mr. Nelligan pointed out that the total for slightly more than a half-year thus amounts to two-thirds of the industry's washer sales in all 1949, which were 3,033,106 washers. Sales this year are at a rate close to that of 1948, the industry's all-time high year, when the total was 4,317,183 units.

Thor Cuts Dryer Retail Price

◆ THE Thor Corporation has announced a 16 per cent cut in the retail price of its electric clothes dryer, reducing the price from $239.50 to $199.50. The reduction is now in effect.

M. R. Wilson, general sales manager, said the price reduction was made possible by savings in production costs resulting from increased sales.

In a letter to distributors, Mr. Wilson estimated the industry's sale of clothes dryers in 1950 will show an increase of 133 per cent over last year's total volume of 105,700 units.

"Of all electrical appliances with low saturation, the dryer offers distributors and dealers the greatest opportunity for plus sales volume," he declared.

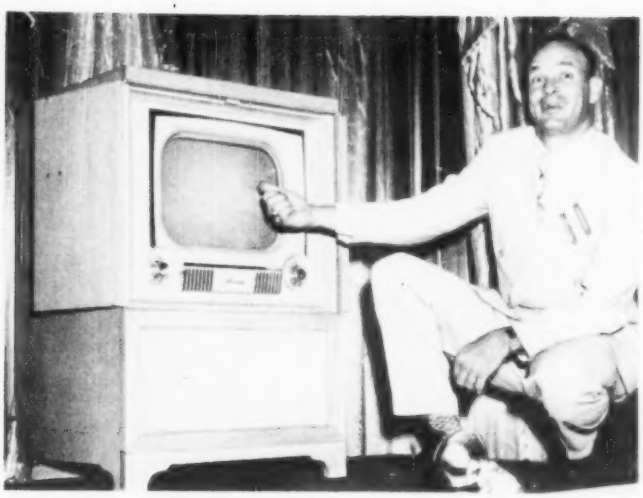
Noblitt-Sparks Name Changed to Arvin

◆ A PIONEER appliance manufacturer, Noblitt-Sparks Industries, Inc., will now be known as "Arvin Industries, Inc.," according to an announcement made by G. W. Thompson, president.

The change, reported Mr. Thompson, is in name only, and neither the policies of the company nor the status of any of its divisions is changed in the least.

The reason given for the change is that the firm has popularized the name "Arvin" through advertising. The proposal for the change in the corporate name came from Board Chairman Q. G. Noblitt, and was endorsed by Dr. Frank H. Sparks, co-founder with Mr. Noblitt of the company.

RICHMOND ANNIVERSARY — Frank Connor, left, president of W. S. Donnan Hardware Co., Richmond, Va., and L. L. Estes, regional manager of Landers, Frary & Clark's Electric Housewares Division, celebrate Universal's 108th anniversary in Richmond. The Donnan Company is the oldest hardware distributor in that section of the country, having been in business since 1840, and has purchased goods from Landers, Frary & Clark since it went into business. Birthday cake, featuring decorative Coffeematic, was cut by Mr. Estes, who presented the first piece to Mr. Connor in honor of his company's long record.



ADMIRING ARVIN'S 1951 LINE — Robert R. Sanders, sales manager of United Distributors, Inc., New Orleans, points to one of the 16-inch television receivers in the Arvin 1951 line, which also includes 37 radio sets. More than 100 Arvin television and radio distributors attended a convention held recently in Highland Park, Ill., to witness the unveiling of the line.

Admiral Increases Television Discounts

◆ DISCOUNTS on the Admiral line of television receivers were increased up to 2 per cent by Admiral Corporation in July.

The action was announced to Admiral's distributors throughout the country in a bulletin signed by Wallace C. Johnson, vice-president in charge of sales.

Johnson pointed out that the new discounts will be passed on by distributors to dealers, and said that the new price structure is applicable to all orders placed on and after June 17, when Admiral's new television line, which slashed retail prices from $80 to $200, went into effect. These prices, Johnson said, remain the same.

Johnson cautioned the company's sales organization "that current unsettled world conditions may reasonably be expected to become even more critical. Receiving tubes of which we use some 25,000,000 annually, just to mention one example, are likely to go on allocation in the very near future."

He added that a "record breaking" volume of orders placed at distributor open houses following the unveiling of the new line indicated that many retailers were aware of an impending TV shortage this fall and urged all dealers to get their merchandise while the getting was good.

Richmond to Sponsor "Electric Village"

◆ THE Electrical Association of Richmond will sponsor an "Electric Village" as a part of the week-long Atlantic Rural Exposition, to be held in Richmond in late September.

The Electrical Association has contracted for one-half of the large exhibition building to house the displays of electrical distributors and appliance dealers, according to C. F. Bennett, executive secretary. On display will be the latest models of major appliances and electric housewares.

This will be the third year that the Electrical Association has sponsored such a show. The first, in 1948, was held in connection with the Richmond Better Homes Show. Last year the association put on a show of its own.

Mr. Bennett believes that the coming event will be the biggest and best yet. Last year the Atlantic Rural Exposition drew 212,000 admissions from all parts of the state. Tying in with the exposition will insure good crowds for the electrical displays.

Admiral Prepares TV Service Manual

◆ SEEKING to eliminate installation and service difficulties which occasionally crop up due to individual servicemen's unfamiliarity with various makes of television sets, Admiral Corporation has prepared an eight-page installation and service manual for its own use.

According to Max Schinke, Admiral service manager, the booklet is issued with each set and is fastened to the inside wall of the cabinet near the TV chassis so that it can be easily consulted, if needed, during installation.

Mr. Schinke said that the book is designed primarily for the serviceman, but it also is helpful to the set owner provided he has knowledge of the high voltage in TV sets, since it is written in a down-to-earth style which enables it to be understood without a detailed course in electronics.

Service data, Schinke said, is included in the form of a schematic diagram of the receiver, voltages are indicated where needed, and all adjustments the service man is required to know are outlined. Particular attention is given to adjustments most often required on installation.

Dates Changed For 1951 Exposition

◆ THE 7th All-Industry Refrigeration and Air Conditioning Exposition to be held at Navy Pier, Chicago, in November of 1951 will be a four-day show instead of a five-day show as originally planned, it was announced recently.

The official dates of the Exposition will therefore be November 5, 6, 7, and 8, 1951, with no special days or previews.

The Exposition is held every other year and was last held in Atlantic City in November, 1949.

New Distributors and Agents Appointed

◆ THE APPOINTMENT of three new distributors for Fowler electric and gas water heaters has been announced by Paul L. Fowler, president of the Fowler Manufacturing Company of Portland, Ore. The distributors will handle both Fowler electric and Fowler gas water heaters.

Two of the new distributors are Clarke Distributing Company and East Tennessee Wholesalers. J. M. Clarke is president of the Clarke Distributing Company, which is located at 1429 Bryant St., in Charlotte, N. C.

East Tennessee Wholesalers is located at 118 West Jackson Ave., Knoxville, Tenn., and George D. Morton is general manager of the firm.

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THE FIRM OF Stratton & Terstegge Co., 921 South 8th St., Louisville, Ky., are new distributors of Arvin television receivers and radios in Louisville and central Kentucky. Raymond P. Spellman, sales manager for the Arvin television and radio division of Arvin Industries, Inc., made the announcement.

Long and favorably known in Kentucky distributing circles, Stratton & Terstegge already handle a representative line of nationally known products. They plan an intensive promotion and merchandising campaign on the new Arvin lines.

W. H. Terstegge is president of the Louisville organization, and Harry Harlon is buyer and sales manager.

•

APPOINTMENT OF the Everitt Corporation, Security Warehouse, Jacksonville, Fla., as exclusive distributors of Arvin TV receivers and radios for that city and surrounding Florida territory, has been announced by Raymond P. Spellman, sales manager for the Arvin television and radio division of Noblitt-Sparks Industries, Inc.

With a well established reputation for successful merchandising of many nationally known products, the Everitt firm will now launch an intensive promotion and sales program on its new Arvin line, according to R. M. Everitt, president of the organization.

L. D. Smart is treasurer and secretary for Everitt.

•

THE C. T. Patterson Company, Inc., New Orleans, La., has been appointed a distributor by the Home Appliance Division of The Murray Corporation of America, it was announced by C. H. Menge, Murray vice-president.

Patterson will handle the new Murray line of steel kitchens, gas and electric ranges, and porcelain steel bathroom fixtures in Louisiana, Southern Mississippi, six Alabama counties, and six Florida counties.

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THE Blackstone Corp., Jamestown, N. Y., manufacturer of household washers, ironers, and dryers, has announced the appointment of several southern distributors.

The Duval Distributing Corp., 1221 Admiral St., Richmond, Va., will distribute Blackstone products in counties in Virginia and North Carolina. They will replace Louis O. Bowman, Inc., of Richmond. Blackstone district manager in charge of this area is Joseph Brady.

Two Texas appointments include that of Watts Hardware & Supply Co., San Antonio, replacing Southern Equipment Co., San Antonio. The territory covered by this distributor will comprise the counties of Texas in the San Antonio area. Blackstone district manager in charge of this area is George Turney.

The other Texas distributor is Russom Gas Appliances, 704 Terminal Warehouse Bldg., Ft. Worth, replacing the Ft. Worth Battery Co. The Russom company will cover the counties of Texas in the Ft. Worth area. George Turney is also district manager for this area.

•

OFF TO ATLANTIC CITY! — Four days and nights of Philco convention meetings and entertainment awaited these winners of the dealers and district managers sales contest conducted by Shobe Inc., distributors of Philco products in Memphis and MidSouth territory. The "Shobe Philco Special," a Chicago & Southern Airliner, was chartered to take the twenty-one men to the convention held recently.

G. E. Offers Home Demonstration Program

◆ A PROGRAM designed to help home laundry equipment retailers obtain more satisfied users has been prepared by the General Electric Company.

The program covers all aspects of post-sale demonstration in the home and will be used by the company's distributors as a guide in developing a staff of trained demonstrators to work for dealers in educating customers on the use of their new laundry equipment.

Titled the "Free Lance Home Demonstration Program," the plan suggests the procurement

of demonstrators to work on a part-time or free-lance basis. It discusses selection and training of personnel, payment methods, successful use of the new home demonstrator, home call patterns, and other problems.

The program will work as follows: General Electric distributors will select and train prospective demonstrators in accordance with the needs of their territories. When the women are fully qualified as demonstrators, they will assist a specified number of dealers. The dealer will be given the name of the demonstrator and will contact her as soon as he delivers a product, either for trial or after a sale. She, in turn, will contact the customer and arrange for an appointment.

At the conclusion of the visit and demonstration, the customer will be asked to sign a statement reporting that she understands the operation and care of her new appliance. The report will then be returned to the dealer to serve as a record of a successful demonstration and a potential file for new appliance sales prospects.

L. G. Hertzler, sales manager of G.E.'s home laundry equipment division, said that the benefits which can accrue from the new program are numerous. To both distributors and dealers, it will mean fewer service calls on equipment which the customer has abused through ignorance. It also means the availability of a large home service staff at nominal expense.

From the dealer's standpoint, it means extra salesmen who can get into a customer's home and be in a position to tell her what additional appliances are needed. The small dealer will be able to offer services comparable to the large dealer. He will have a well trained person for special promotions, demonstration programs or clinics—yet he will pay her only when she is actually demonstrating.

The home-service woman will have pleasant employment with the opportunity to choose her own working hours at excellent remuneration.

"But above all," Mr. Hertzler said, "the program means more satisfied customers."

Silent Salesmen

Youngstown — Selling Course

To HELP the more than 10,000 retail Youngstown Kitchen salesmen across the country in the highly competitive scramble for the consumer dollar, Youngstown Kitchens, Mullins Mfg. Corp., Warren, Ohio, is providing its distributors and dealers with a new five-hour course in the fundamentals of salesmanship.

Entitled "Five Steps to Selling Action," the session is an advanced part of the company's regular training course which has been carried on since 1940. This is the first time that emphasis has been put on how to make a sale. Other parts of the course deal mainly with kitchen planning and with Youngstown's products.

The entire session in selling is recorded on sound slide films and in motion pictures. Through this device, the identical story is told to all trained Youngstown dealers. Each of the company's 64 national distributors are now presenting the course to its dealers. Nearly all salesmen will have seen the presentation by June 1.

The selling steps covered in the session include: (1) ways of finding prospective customers; (2) how to tell the product story; (3) how to answer objections; (4) how to close a sale; and (5) the proper methods of following up a sale.

General Electric — Housewares Counter Display

A NEW counter fixture designed to display electric housewares in minimum space is being made available to General Electric retailers through their distributors.

The fixture is 30 inches wide, 15 inches deep, and 28 inches high. It permits display of a number of appliances at several different levels—on the base and on four movable shelves. The shelves are supported on two tubular columns and can be adjusted for the appliances to be featured. Finger screws make it possible to move the shelves up, down, and all around the columns.

American Kitchens — Kitchen Planning Device

THE American Central Division, Avco Manufacturing Corporation, Connersville, Ind., producer of American Kitchens, recently began supplying its distributors and dealers with a new kitchen planning device, Plan-A-Kit.

The American Plan-A-Kit is especially suited to planning the kitchen right in the prospect's home. It is light, compact, and easy to assemble. The basic piece is a steel plate decorated with attractive wall coverings and flooring—printed on—and having scaled dotted lines that indicate ceiling and floor levels.

Against this background the planner "installs" sink, base and wall cabinets, windows, doors, and appliances, simply by placing the various units against the board in the desired arrangement. All of the various sizes and models of the American Kitchens products are individually designed to isometric scale, are die-cut out of heavy art board, and covered on both sides to exact scale with a photographic replica of the unit. A small but powerful magnet is embedded in the center of each cut-out. The magnets hold the sinks and cabinets firmly in place against the steel planning board.

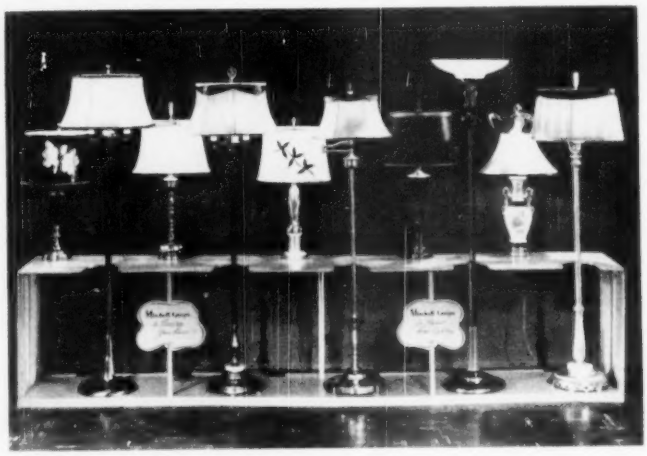
Zenith — Press Book

A PRESS BOOK demonstrating to dealers how they can share the 1950 portable radio market is being provided by Zenith Radio Corp., 6001 Dickens Ave., Chicago 39, Ill.

Effective use of local newspaper advertising, from mats supplied by Zenith, and dramatized store promotion through display material that Zenith also furnishes, figure in the sales building strategy.

In addition to briefing the Zenith dealer on the selling points of each of the four Zenith portables, the 24-page press book supplies figures of the market potential in 1950, illustrates a score of different places and situations where portables are useful, if not indispensable, and actually shows dealers how to set up 24 different window displays to make the most dramatic eye-catching impressions.

The book tells of Zenith's own national advertising program on behalf of the portables, and advises how newspaper advertising mats that Zenith furnishes may be used to cash in on



Mitchell — Lamp Gallery

A COMPLETE, integrated floor and table lamp department, called the Masterpiece Lamp Gallery, and using only 10 feet of floor space, has been announced by Mitchell Manufacturing Co., 2525 Clybourn Ave., Chicago 14, Ill.

Just recently offered to the trade, this gallery of lamps is adaptable to practically any dealer's show room in many lines of retail business. It consists of a permanent wired display that is completely wired, ready to use, and ten assorted Mitchell Masterpiece lamps.

The display is completely finished in decorator green. Shipped flat in a carton with the lamps, the Masterpiece Gallery can be assembled and installed in five minutes without any tools. The lamps can then be placed in position and plugged into outlets that are already wired into the display. The ten Masterpiece lamps consist of table lamps, floor lamps, one "certified" lamp, and a popular torchier.

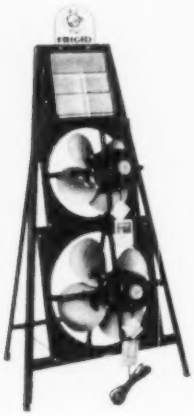
In announcing this 10-foot gallery of lamps, the manufacturer also announced the availability of a four-color brochure illustrating all of the lamps in their natural colors and explaining the entire deal to retailers. Copies of this brochure are available to any interested dealers by writing to the manufacturer.

REFRIGERATION DISPLAY—Ed Byrne, right, divisional sales manager for Gibson Refrigerator Company shows Charles R. Rew, left, president of Alabama Appliance Co., Birmingham, the "touch-a-tap" feature on a new Gibson refrigerator. The display piece points out cold water at a touch of the finger, all day long, the year round.

the current national advertising.

It also contains tips on local publicity tie-ins, and the use of direct mail advertising by the dealer.

The Circus Parade Display, No. R-094, consists of an eight-color centerpiece, 34 by 30 inches, and four three-dimension displays to hold actual Zenith portables. Each display is keyed to the appeal of the set it advertises.



Circulators & Devices — Steel Display Rack

This all-steel rack permits display of a louver-type shutter and two exhaust fans. Available from Circulators & Devices Mfg. Corp., 128-168 32nd St., Brooklyn 32, N. Y., the rack permits demonstration of the fans.

COMFORTROL FOR YOUR CUSTOMERS
PROFIT FOR YOU WITH
Everhot Electric Blankets

ONLY
EVERHOT
HAS THE
Comfortrol

Beautiful gray plastic exterior with on-and-off switch and large temperature selector dial. All component parts mounted on shock-proof metal. Each dial position is automatically illuminated. Adjustments can be made by sight, sound or touch in the dark.

CAT. 922 72" x 86" — Dual control. Full size blanket. Warmth of each half of blanket may be regulated separately if desired. Retail price $49.95.

CAT. 921 72" x 86" — Full size blanket. Single Comfortrol. Retail price $42.95.

CAT. 923 66" x 86" — Twin size blanket. Single Comfortrol. Retail price $39.95.

All models available in Desert Rose, Jupiter Blue, Berkshire Green.

ALL through the South dealers get quick customer acceptance for the famous EVERHOT Electric Blanket with its exclusive automatic Comfortrol. Those living in homes without central heating are excellent prospects. They are quickly sold because they see the need for the protection and comfort of an Everhot Electric Blanket.

Each Everhot blanket packed in new and attractive carton . . . perfect for gift sales . . . keeps blanket spotless. It's an eye-appealing . . . traffic-stopping package that will make quick sales for you.

SINCE 1884 **Swartzbaugh**
OF TOLEDO

Names and Faces

William J. Cashman, director of advertising and promotion for **Landers, Frary & Clark** of New Britain, Conn., has announced the appointment of **Richard B. Almy** to its advertising and promotion staff.

Mr. Almy has been assigned to the new advertising program being instituted for the Universal line of electrical housewares.

Before joining Landers, Frary & Clark, Mr. Almy was an account executive with Hugh H. Graham & Associates, Inc., a New Britain advertising agency. Prior to that he was director of public relations for the University of Louisville, Louisville, Ky., and formerly an account executive in the Baltimore office of MacManus, John & Adams, Inc., Detroit advertising agency.

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Maurice Lipsich, of the **Dormeyer Corporation**, in Chicago, has been promoted to the position of advertising manager with the same company.

Working closely with **Marvin Allesee**, executive vice-president in charge of sales, Mr. Lipsich has helped accelerate many of the sales, merchandising and advertising programs of the pioneer kitchen appliance firm.

Mr. Lipsich has been with Dormeyer five and one-half years. Prior to that, he had 13 years' experience in retail management, sales, and advertising.

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Ronald O. Fitzgerald has been appointed divisional sales manager for the **Easy Washing Machine Corporation** with headquarters in the Candler Building, Atlanta, Ga. He is in charge of a newly formed division covering Tennessee, Arkansas, Alabama, Georgia, and Florida.

Mr. Fitzgerald entered the appliance selling field in 1930 as sales manager of the appliance department for Kam-Sloan Co., Nashville, Tenn. He joined Peaslee-Gaulbert Corp., Louisville appliance distributor, in 1935, as sales manager for Easy washing machines. In 1940, Mr. Fitzgerald joined Easy as district sales manager for the Empire Division in New York State.

After service with the Medical Corps of the U. S. Army from 1943 to 1946, he returned to Easy as district sales manager for the Syracuse, N. Y., district, and remained in this capacity until his recent advancement.

Ronald O. Fitzgerald

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M. B. Wooley has been named manager of the new home appliance division of **Hendry Lumber Company**, 1400 Second Ave., No., St. Petersburg, Fla., it has been announced by **Robert W. Hendry**, president.

The new manager has been in the appliance business in St. Petersburg since he arrived in 1948. Earlier he was in the same field in Indianapolis after graduation from Butler University.

The Hendry firm is planning an expansion and modernization program at their showroom.

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Nineteen district managers have been announced by **General Electric's** Receiver Division as part of expanding commercial operations in the radio and television receiver fields.

All are new positions in the division's field sales organization, according to **Arthur A. Brandt**, general sales manager.

The appointments include **F. S. Anderson**, Washington; **John Klenke**, Birmingham; **F. W. McDonald**, St. Louis; **R. J. Meigs**, Kansas City; **C. L. Schmidt**, Dallas; and **T. B. Willard**, Atlanta.

•

The appointment of **Hugh P. Lynch** as major appliance factory representative for **Westinghouse Electric Corporation**, Middle-Atlantic District, has been announced by **Elmer M. Binns**, appliance district manager.

Mr. Lynch, formerly buyer of appliances and furniture for General Department Stores of Huntington, W. Va., will serve the Westinghouse distributors in Charleston and Bluefield, W. Va., and Bristol, Virginia-Tennessee.

The new factory representative has had extensive experience in retail training and consultant activities in merchandising and retail personnel. In 1945, he went to Marshall College, Huntington, W. V., to establish a department of retailing. He also conducted summer school courses in retailing subjects at Temple University, University of Pittsburgh, and Colorado Agricultural and Mechanical College.

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Landers, Frary & Clark has announced the appointment of **Phillip A. Fitts** of Nashville, Tenn., as district manager of the Home Laundry Division in Kentucky and Tennessee.

Prior to his association with Landers, Frary & Clark, Mr. Fitts was general manager of the Winnesaw Supply Co., Inc., of Nashville. He is a graduate of the Northwestern Military & Naval Academy, Lake Geneva, Wisc., and the University of Illinois.

Phillip A. Fitts

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Clif Simpson has been named the new managing director of the **Electric Association of Chicago**, according to **Axel Kahn**, president of the association and district manager of General Electric Supply Co., Chicago. The appointment became effective June 5.

Mr. Simpson had been associated with the **National Appliance and Radio Dealers Association** as its managing director for the past four years. Originally headquartered in Washington, D. C., Mr. Simpson moved his staff to the Merchandise Mart in Chicago at the beginning of 1948.

The new Electric Association head succeeds **Major Ainsley Gray**, who is retiring from active association after 29 years, Mr. Kahn said.

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Announcement has just been made by the **Samson United Corporation** of Rochester, N. Y., of the resignation of **William G. Church**, vice-president in charge of sales of the corporation for the past 10 years.

Mr. Church is resigning in order to devote his full time and attention to the operation of the W. Alan G. Church Corporation, a national sales organization which he founded several years ago and which has headquarters at 350 Fifth Ave., New York City.

Succeeding Mr. Church will be **Lewis Vogler**, who has served as assistant sales manager and is well known in the electrical appliance industry.

E. H. Norling has been appointed manager of the retail development section of the **General Electric Appliance & Merchandise Department**, it has been announced by **A. M. Sweeney**, general sales manager.

Mr. Norling joined the company in 1927 in the advertising and sales promotion division of the refrigeration department. He subsequently was a kitchen specialist, war-time expediter and sales manager of the sunlamp and heater section. He has been a member of the retail development section for several years.

In his retail development work before and during the war, Mr. Norling originated many dealer sales plans. He prepared the first retail sales training courses for refrigerator salesmen.

•

The appointment of **Seddon Allen**, as South Central district sales manager for **Thor Corporation**, has been announced by **Frank J. Simpson**, vice-president. Mr. Allen will make his headquarters at Memphis.

In his newly created position, Mr. Allen will contact Thor distributors and dealers at Memphis, Nashville, and Chattanooga, Tenn., New Orleans and Shreveport, La., Little Rock, Ark., Bristol, Va., and Harlan, Ky.

Before joining Thor, Mr. Allen was a member of the city sales force of Mills-

Seddon Allen

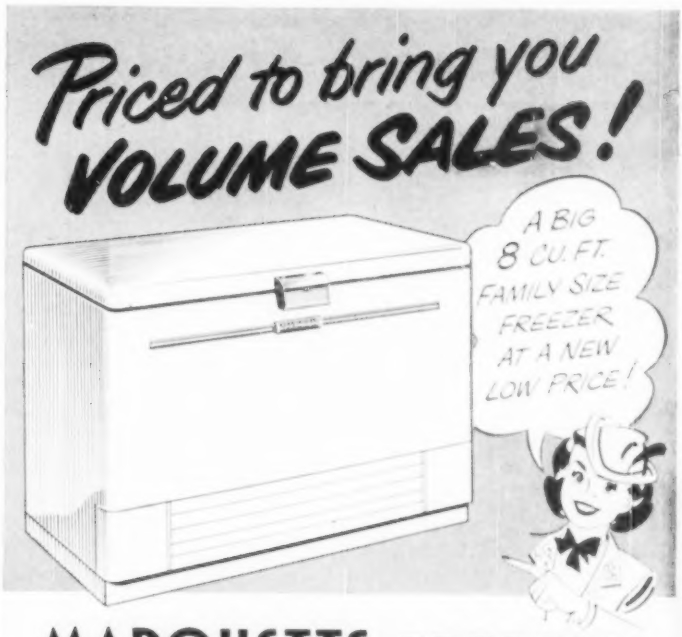
Morris Co., Memphis distributors of electrical appliances, for 18 months. From 1945 through 1948 he was associated with Joyner-Heard Co., Memphis real estate firm.

•

Douglas Bergquson has been appointed manager of the **Coolerator** Market Research Department, it has been announced by **W. C. Conley, Jr.**, Coolerator general sales manager.

A native of Minnesota and a graduate from the University of Minnesota School of Business Administration, Mr. Bergquson will supervise the Coolerator sales analysis systems and direct the work of the statistical department.

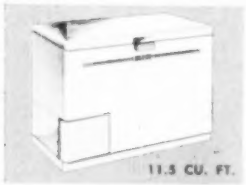
Mr. Bergquson comes to Coolerator directly from the General Mills Home Appliance Department in Minneapolis.



MARQUETTE FREEZER

Now a bigger value than ever! New low price on the Marquette "family 8" brings owning a freezer into the reach of thousands of new prospects. It means bigger sales . . . bigger profits for you!

And look at the deluxe extra-quality features you offer in a Marquette Freezer!



- All welded steel construction . . . all metal surfaces completely foundered.
- Vapor-sealed cabinet . . . every joint and seam of entire cabinet is permanently air-tight and moisture-proof.
- Counter-balanced doors . . . give safe, easy access to foods.
- Heavily insulated with rock wool for higher efficiency.
- Lighted cabinet interior . . . automatically illuminated when door is opened.
- Hermetically sealed Tecumseh compressor . . . for dependable, trouble-free service.
- Gleaming white DuPont DuLux finish . . . for attractive exterior. Interior has rust proof, odor-proof aluminum finish.

Write for details on a Marquette franchise.

MARQUETTE APPLIANCES, INC.
307 EAST HENNEPIN
MINNEAPOLIS 14, MINNESOTA

MARQUETTE *Appliances*

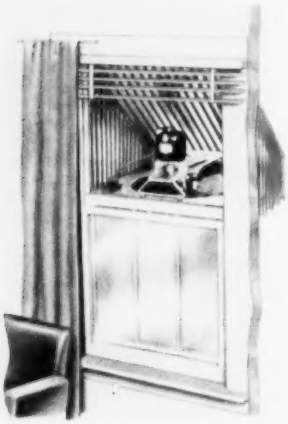
AMERICA'S VALUE LEADER IN HOME APPLIANCES

Product Parade

Koolmaster Awning Fan

The new Koolmaster Awning Fan, manufactured by Air Equipment Co., 1713 W. Carroll Ave., Chicago, Ill., was designed to fit the small home owner's budget.

The fan fastens entirely on the outside of the house, eliminating costly installation charges and any defacing of the building. It can be easily as-



sembled by any home owner in a few minutes with a screw driver and wrench.

The new unit ships flat, saving on storage and reducing handling charges. It is a 24-inch exhaust type fan, equipped with a ¼-h.p. heavy-duty vertical shaft motor plus Torrington blades. The fan is designed to handle 5,000 cfm and will accommodate itself to 28-, 30-, 32-, or 36-inch windows.

The unit comes complete with awning and lead-in cord for plugging into any convenient wall or baseboard outlet.

•

Electric French Fryer

Two new features suggested by a consumer panel of housewives have been incorporated in the new automatic electric french fryer now being introduced by the Burpee Can Sealer Co., Barrington, Ill.

These features are: (1) a countersunk, oil-tight cover that fits over the handle of the frying basket to permit frying with the lid on, for safety against hot spattering cooking oils; and (2) a new ring-type Chromalox heating element that may be easily removed and replaced for quick servicing.

In addition to the new features, the fryer, which is round in design, has a die-drawn plate aluminum, stain-proof seamless cooking well.

Self draining basket, bakelite handles and legs, precision calibrated thermostat, full view pilot light, and other features are as previously announced, according to the manufacturer.

•

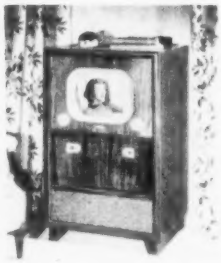
Arvin 1950 Line

Introduction of the completely new line of 1951 Arvin TV "Visible Value" receivers and "Velvet Voice" radios, was made to Arvin distributors recently.

Fifteen TV receivers in a wide variety of screen and cabinet sizes, and 30 new radios in a pre-tested color range comprise the new line.

Ranging in screen size from 8½-inches to 16-inches with both round and rectangular tubes and featuring the first Arvin combination phono-radio model, the new TV receivers cover a broad range of prices, mechanical features, and cabinet finishes. The line has been divided into custom and de-luxe models.

Arvin is presenting what is thought to be TV's first color cabinet. This is Arvin's model 4081T in a willow green metal cabinet. It is an 8½-inch set and will retail at $119.95. Together with model 4080T in mahogany and limed oak finish metal cabinets also at $129.95, these models are Arvin's price leaders.



The new offering will encompass 13 TV sets in the de luxe line and two models in the custom group.

Five 12½-inch sets are highlighted in the de luxe line, and six 16-inch sets with rectangular tubes round out Arvin's 1951 de luxe line.

Arvin's new custom line will be composed of two models: the 4162CM at $329.95 and the 4162CB at $339.95. Both are console styles, the former in mahogany and the latter in limed oak.

Thirty new radios, in portable, AM and FM models and a wide selection of colors and prices, comprise the 1951 radio line which Arvin announced to its distributors.

Arvin's 446P and 350PL sets have been restyled for compactness and easy portability. The former will retail at $16.95 and the latter at $34.95. They are being manufactured in a range of six colors.

Seven sets ranging in price from $12.95 to $34.95 and available in a wide array of interesting "decorators' colors" are included in the 440T, 450T, and 460T lines. All are table models.

Two new FM sets, the 481 TFM at $49.95 and the 480TFM at $54.95, are other additions to the line. The former is available in a plastic mahogany cabinet and the latter in plastic cabinets of rosewood, willow green, sandalwood, or ivory.

•

20-Inch Window Fan

A new 20-inch two-speed window fan equipped with adjustable mounting panels is announced for 1950 by The Emerson Electric Manufacturing Co., St. Louis, Mo.

Easily, quickly installed, with or without the adjustable side panels, the fan is equipped with panels which permit installation in windows 27½ to 36 inches in width between window stops.

Accessories are also included to permit installation in smaller windows with a minimum opening of 20 inches square.

Finished in ivory, the fan is equipped with a current-saving capacitor motor, and three large quiet-type blades. It delivers 3500 cubic feet of air per minute in high speed and 1925 on low speed.

•

Tuckaway Table

To more advertise, display, and demonstrate its Ranchio electric range, the Westinghouse Electric Appliance Division, Mansfield, Ohio, has made available to its dealers a large capacity, yet compact, Ranchio service table.

Twenty-six inches high, it can be used as a storage space for mixers, toasters, waffle bakers, sandwich grills, and other electric housewares, and tucked right under the Ranchio range

The service table is mounted on free-rolling casters and is designed to save countless steps in meal preparation and serving. Trim in appearance and easy to clean, it is finished in white enamel with highly polished chrome legs.

•

Westinghouse Housewares

A NEW electric blanket and five new electric housewares products have been announced by the Westinghouse Electric Appliance Division, Mansfield, Ohio.

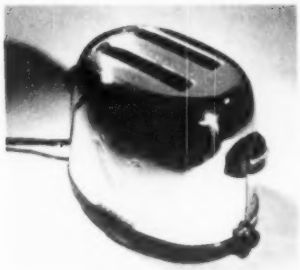
In addition to the electric blanket, announced were a new square waffle baker, pop-up toaster, twin waffle baker, sandwich grill, electric iron, and warming pad. The newly styled and engineered appliances and electric blanket will be available nationally by early fall and all prices are listed under fair trade laws in states having such statutes.

The new electric blanket will be available in three decorator colors—Evening Rose, Sapphire Blue and Emerald Green—and is 72 inches wide and 86 inches long to completely cover a double bed.

The new waffle baker turns out 81 square inches of baked waffle at a time.

The new automatic pop-up toaster features a new control mechanism that combines the advantages of a timer plus those of a thermostat control. The time that it takes to toast bread on any given setting always remains the same, regardless of whether the line voltage is high or low.

The sandwich grill toasts, fries, grills, warms, and makes tasty waffles with



a separate set of waffle grids that are available as an accessory.

A signal light that shows when the iron has reached a pre-selected temperature is a feature on the new electric iron.

•

Zenith TV Line

TWENTY-THREE NEW television models comprise the new line manufactured by Zenith Radio Corp., 6001 W. Dickens Ave., Chicago 39, Ill.

There's a set for every style home and a price to meet the requirements of almost any budget, claims the manufacturer, for the new receivers range from the $179.95 table model through the consoles to an all-in-one distinctively styled combination which retails at a suggested price of $695.

A feature in the new line is Zenith's 2-in-1 "Selecto-screen" and duplex picture control, which means that set-owners, by the flip of a switch, now have their choice of either the "Giant Circle" screen that provides 17 per cent more picture surface than its alternative, a comparable rectangular screen.

Another innovation is the reflection-proof picture tube, which virtually eliminates reflection of lights, windows, and other bright objects from the screen at normal viewing positions when the set is in operation.

Another new feature is the "Lazy Bones" remote control station selector which is optional with the new sets.

•

Westinghouse Range

A NEW DELUXE electric range that features a new Super Cirox unit on which a breakfast of bacon and eggs can be cooked in three minutes has been introduced by the Westinghouse Electric Appliance Division, Mansfield, Ohio.

The new model, called the Commander, will retail at a suggested price of $329.95 for the single-oven model, and $369.95 for the double-oven model.

HOTPOINT DISPOSALL — This cutaway drawing shows the new Hotpoint Disposall as it fits in an automatic dishwasher-sink. Model MW5 is the standard version, while MWP5 can be installed in a ready-plumbed dishwasher-sink. New Disposalls are more compact, and have white outer jackets with bright metal trim.

Highest Quality Water Heaters at COMMON SENSE COST

Important selling features make these water heaters move fast and yield greater profits to you

- Elno Rustopper Anode Rod
- Wheeling Extra Heavy Tank
- Westinghouse Heating Element and Thermostat
- Fibre Glass Insulation
- Ten year guarantee and warranty plan
- Peak Performance — — Peak Profit
- Table Top and Upright Models

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NAPIER FIELD DOTHAN, ALA.

ELECTRICAL SOUTH

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AUGUST 1950

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BARON CREAGER, *Southwestern Editor*
1305 National City Bldg., Dallas, Tex.

T. W. McALLISTER, *Vice-Pres., Editorial Director*

FRANK P. BELL, *Business Manager* J. A. MOODY, *Production Manager*

Business Representatives

T. B. CHAPPELL, 427 W. 4th St., Los Angeles, Calif. Tel. Mich. 9843
JOHN C. COOK, 624 Lincoln Ave., Highland Park, Ill. Tel. 1539
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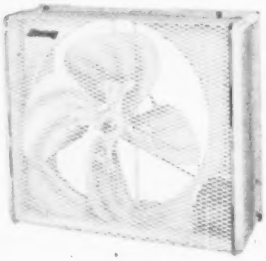
With the Murray Line the Weather Is Fine . . .

THE MURRAY 24-INCH WINDOW FAN

This fan produces ample ventilation for the average small home or apartment. It operates quietly, it is sturdily made of fine materials and is finished in a rich ivory color with bright stainless steel trim. Windows can be opened and closed with the fan installed, eliminating storage problems.



Deep pitched patented Torrington blade for maximum air delivery and quiet operation. Two thumbscrews at top remove front guard for convenient and easy cleaning. Equipped with 1/3 hp General Electric or Westinghouse motors which provide ample power. Lifetime bearings—require no lubrication. An exclusive Murray feature.

JOBBERS—You can handle this complete fan line knowing you are selling the best. A few territories are available. Write for details and full information.

THE MURRAY CO. of TEXAS, Inc.
Atlanta 1, Georgia Dallas 1, Texas

Sales Agents

H. C. BIGLIN CO., Inc. **Atlanta 3, Ga.**
177 Harris Street, N.W.

While the new unit is rated at 1250 watts, a standard rating, it is designed to receive a surge of current in its initial operation that brings the new unit to a red heat in 30 seconds.

The range has Color-Glance controls that indicate heat positions on a color band. The oven as well as surface unit controls feature the color treatment.

The four surface units, including the fast Super Cotox unit, have five heat control positions to meet all types of surface cooking needs. These units are so spaced that four 10-inch utensils can be used on them at one time.

•

Zenith Radio Line

ELEVEN NEW RADIO receivers were announced as additions to Zenith's line by Leonard C. Truesdell, vice-president in charge of household receivers, Zenith Radio Corporation.

The new ac-dc table set, called the Zephyr, has a new, super-powered Consultone (Reg. U. S. Pat. Office) which is Zenith's method of achieving the vibrant bass and delicate treble response usually expected only in "big" radios. AM station coverage comes from 540 through 1600 Kcs.

The Zephyr houses a 5½" extra-quality Alnico 5 speaker; a 3-gang condenser for sharper station selection; a built-in Wavemagnet to eliminate outside aerials, and bass tone compensation which maintains proper tonal balance between bass and treble.

This Zenith is available in maroon, ebony, or white plastic with a "Roman gold" trim. Its suggested retail price is $34.95. In white — it is $36.95.

The new table radio-phonographs are the Carleton and the Beacon Hill. Both feature the new-type automatic variable speed record changer called the Cobra-Matic. This changer accommodates all speeds and sizes of records. It will play any speed, now or yet to come, from 10 to 85 r.p.m. It will play any size recording — twelve 7-inch, twelve 10-inch, and ten 12-inch.

Both are five-tube sets. They contain, in addition, one power rectifier. Both speakers are Alnico 5's measuring 5½ inches.

There are four new Zenith radio-phonograph console combinations. They are the Mayflower, the Beverly Hills, the Tudor, and the Classic.

All four feature the new Cobra-Matic variable speed changer with its simplified operations, super-sensitive Zenith-Armstrong FM, and Zenith's Long Distance AM reception.

The Beverly Hills, Tudor, and Classic also introduce a super-Alnico "1213" speaker which is 2½ times more sensitive. These sets have a tone control which is designed to give a choice of 64 different tonal combinations.

The Mayflower is a seven-tube set, while the remaining three radios are nine-tube sets. Each set contains, in addition, a power rectifier.

Kitchen Ventilating Fan

The new NF-10 kitchen ventilating fan has just been announced by Nu-Tone Inc. Madison and Red Bank Rds., Cincinnati 27, Ohio.

The new ventilator was designed for fast, simple installation—a screwdriver is the only tool needed. The fan delivers 1,000 cfm. and carries a five-year guarantee on the motor. The rest of the fan is guaranteed for one year.

Ventilators are easily cleaned, and the motor and blade easily removed.

"Separate unit packaging" eliminates lost parts, bent blades, or damaged finish. The heavy, high-temperature baked enamel over a zinc chromate undercoat on all sheet metal parts assures durability of finish.

•

Portable Dishwasher

The Apex Electrical Manufacturing Co., Cleveland, Ohio, has announced the manufacture of a completely automatic portable dishwasher.

Called the Apex Roll-A-Way Automatic Dishwasher, the product is mounted on casters, with top dimensions of 17 by 24 inches. The new dishwasher stands 36 inches high, which is standard kitchen cabinet height. When closed, the rectangular top provides a convenient work surface.

It is plugged into any convenient electric socket and the water intake hose is attached readily to the hot water faucet. The run-off hose hooks over the edge of the kitchen sink. Used alongside the sink, it can be rolled away after the fully automatic wash and rinse cycle is completed. Because it is so light weight, it can be loaded into the family auto and transported for use in a summer cottage.

These features make it especially attractive to the renter who does not want to make a permanent dishwasher installation.

•

Table Oven

A table oven developed just recently to team up with the Arvin Electric Cook has been announced by Arvin Industries, Inc., Columbus, Ind.

The oven fits quickly and simply into place on the opened-out lower half of the Lectric Cook. Heat is distributed uniformly from two sides of the Cook when the oven is in use. Designed to provide the convenience and the utility of a second oven, it bakes cakes, pies, or pastries, roasts meat or fowl, and cooks vegetables. The manufacturer claims it is particularly effective for using the many prepared biscuit, pie, and cake mixes now on the market.

Weighing 6½ pounds and containing almost a full square foot of interior space, the table oven sells at $8.95, or its combination with the Lectric Cook for $29.90.

•

Youngstown Electric Sink

A new automatic dishwasher, housed in the 48-inch electric sink model, has been announced by Youngstown Kitchens, Mullins Mfg. Corp., Warren, Ohio.

The washing action, completed in 9 ½ minutes under normal water pressure and including washing and two hot rinses, is equal at all parts of the tub. The top opening lid pops open at the end of the cycle and dishes dry almost immediately.

Other features include a refuse strainer that can be removed and cleaned without removing the baskets, a sound deadened tub, and a switch which allows interruption of the cycle to place forgotten dishes.

On this model, the dishwasher unit is located on the right. The sink bowl

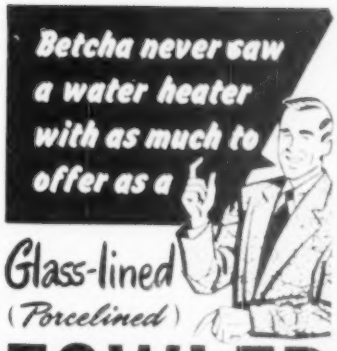
on the left is extra large and equipped with a swinging mixing faucet and spray. The garbage disposer is optional equipment. The unit is 48 inches wide, 36 inches high, and 27 inches from front to back at center. The unit will be sold by Youngstown dealers after September 1.

•

Hoover Floor Polisher

A new floor polisher, designed and styled by the engineering division of The Hoover Company, North Canton, Ohio, pioneer maker of electric cleaners, and made by Hoover's wholly-owned subsidiary Hoover, Ltd., in Hamilton, Ontario, is offered U. S. distributors by the company's newly formed special products division. It is designed to retail for $69.95.

The polisher is attractively finished



Glass-lined
(Porcelined)
FOWLER

One look will convince you . . .
Fowler has everything it takes to make a water heater BEST!

Made by a national manufacturer with more than 45 years of water heating experience, Fowler has features that make customers want Fowler . . . *and nothing but Fowler.*

GLASS LINING . . . first with Fowler!

ELECTRIC WATER HEATERS

GAS WATER HEATERS

WARRANTY

LOWEST PRICED

Dealers — Distributors . . . WRITE FOR FULL DETAILS

FOWLER MANUFACTURING COMPANY
2545 S. E. Gladstone • Portland 2, Oregon

in beige and brown. It comes with a built-in headlight, a feature exclusive with Hoover, and weighs only 13½ lbs.

The polisher is equipped with two sets of buffing pads, one of felt and one of lamb's wool, to give floors and other finished surfaces a hard, bright and lasting polish. The brushes, of Tampico fibre, revolve at 785 r.p.m.

The polisher has a ventilated motor, to ensure low operating temperature, with self-lubricated bearings and precision-made, worm-geared drive (no belt). Motor speed is 11,000 r.p.m.

•

Dexter Washer

THE NEW Dexter Sealed-Heet Super De Luxe Washer has been announced by The Dexter Co., Fairfield, Iowa.

Characterized by the full-skirt design, the new washer has dual-wall construction with the tub thermex sealed at top and bottom, giving complete therm-air insulation and keeping wash water at correct washing temperature.

The washer is also equipped with a corro-vane, hi-wing agitator for double-quick agitation, and has a super century single transmission with four moving parts.

Lifetime guarantee and a 10-year replacement bond are added features of the new appliance.

Housewares are Leaders

(Continued from page 73)

ways. First, there is the profit from the sale. Right off the bat, the outside presentation has paid for itself.

"But more important is the fact that in making the sale, we have put a new account on the books. These accounts mean future sales of big ticket appliances as well as electric housewares."

Lester Martin is a strong believer in "getting an account onto the books"—and in outside canvassing as the way to do it. Recently, he put a crew of women on the street making cold calls in one section of New Orleans.

"It was their job to get accounts," he says. "When they talked to the housewives and husbands, they stressed the Emblem name, the national brands we sell (and consequently the confidence with which people can buy from us), prices, and finally, the convenience of having an account at our two stores.

"The close was a definite proposition. The customer was invited to open an account by paying one dollar down on the spot, and then paying a dollar a week for 10 weeks. That gave the customer a $10.00 credit at Emblem stores. The credit, our women canvassers explained, could be used in making a cash purchase of a small appliance, as down payment, or as partial down payment on a big ticket appliance.

"Before the women went out, one of our regular salesmen was sent to pioneer the plan and test its sales points in practice.

"In a single morning, he opened seven new accounts with this presentation—and all seven were immediate prospects for major appliances as well as electrical housewares."

What were the results of this cold canvass? "When a customer opened an account, the canvasser gave her, as our gift with no strings attached, a pair of 24-inch hurricane lamps to put on a vanity table," Martin reported.

"We began with 130 pairs of these lamps on a Monday morning. By Wednesday afternoon, I had to wire our supplier for a fast shipment of more lamps, and by late Friday afternoon, all of the original 130 pairs of hurricane lamps had been given away to 130 new customers with accounts on our books."

Both Emblem stores stress national brands in electric housewares selling. "In that field, it is possible to get many outlaw and 'specially made' appliances, and with these some dealers apparently undersell the big brand names," says Mr. Martin.

"We don't do that, and we won't do it. Our idea is that, although we might make some quick sales and add a few fast bucks to the till, we wouldn't profit in the end because unless an appliance gives full and complete satisfaction throughout a long life, the dealer who sells it not only garners grief in the form of complaints and adjustments, but very frequently loses good customers, too.

"When people buy appliances from Emblem, they can be absolutely sure of complete satisfaction. That goes whether they

Economaster

A Great Name For Outstanding Value —

— offers you an electric heater that need only be displayed to assure you increased sales and higher profits this fall and winter.

Economaster heaters are tried and proven. No other heater offers more in customer satisfaction. Here is high quality at economy prices with nearly a million satisfied users.

Write today for full information and name of your nearest distributor.

Model D

1250 Watts 115 Volts AC DC

Easy to sell at $9.95

ECONOMASTER SALES, INC.

128 8TH AVENUE NORTH

NASHVILLE TENNESSEE

purchase housewares or big ticket merchandise, because we only sell nationally advertised brand name appliances."

The two Emblem stores are located at opposite ends of sprawled-out New Orleans, a city (fourth largest in land area in the United States) which covers a vast 30 square miles. Each of the stores has a traffic location, using different varieties of traffic.

The main Emblem store is on Gentilly Road in downtown New Orleans, the section of the Crescent City which has experienced the greatest part of the city's postwar growth. It is not in what is usually termed a business district. Its traffic—which is heavy—passes the door on Gentilly Road, a main thoroughfare.

For automobiles, the store has built parking areas in the front, and depends upon backless windows which utilize the entire first floor area as a single gigantic appliance display. The outdoor sign can be seen from blocks away in either direction.

The store at 8200 Oak Street has heavy foot traffic. It is across Oak Street from a Woolworth 10-cent store. "Location across from a dime store is a big help," Mr. Martin says. "The Woolworths, Kresses, McCrorys, and other chain variety stores are strong traffic pullers."

The Credit Problem

(Continued from page 75)

terms they can get from some other merchant but they prefer to buy your merchandise if you can meet the fantastic terms.

Buying on credit has doubled since 1941 and there is now growing another plant in the merchandise garden that promises to grow faster than credit and that is insurance on the lives of those who buy on credit.

Reliable statistics show that insurance on the lives of debtors has increased eight times since 1941. This insurance does not insure that the debtor will make the payments but insures that the debt will be paid if the debtor dies.

The thing that holds all of this up is the national income which is at its highest level. Present installment debt is one-nineteenth of the income which is a highly satisfactory figure, and the ratio is not as high as it has been in other years.

However, most financial experts are agreed that the breaking point is here and it is time for the merchant to be sure that all his credit deals are sound. William A. Reckman, president of the Western Bank and Trust Co., Cincinnati, recently told the American Institute of Banking: "It would be well to plan now for a period ahead when the ability of the borrower to make repayments as and when due may be strained, if not impossible."

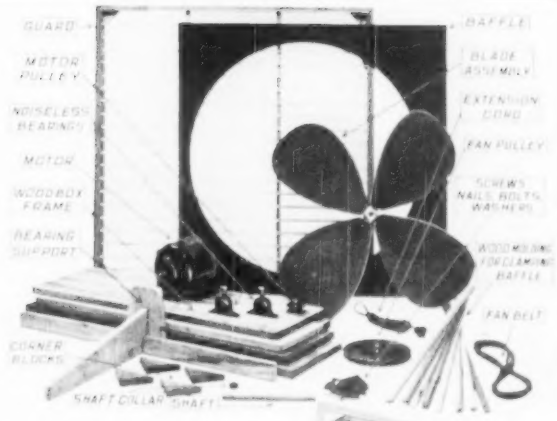
This, then, is a good time to try to sell the customer on early ownership of his appliance instead of trying to stretch the terms for him. Tell him, as General Motors Acceptance Corporation is in its advertising, that credit costs money and that it is to the customer's positive advantage to pay as much down as he can and to make the monthly payments as large as he can so that he borrows the money for a shorter period and comes into clear ownership earlier.

Good solid citizens will listen to this kind of talk even though they have been led astray with easy payment terms of others.

Credit is, of course, the life blood of the appliance business. The thing is to use it to the advantage of both the merchant and the customer.

There is an old adage in business that if there is any money to be lost in business, let the other fellow do the losing.

It is comparatively easy to learn whether the credit customer has overloaded himself when the credit application is made out. If his own record of bills he owes adds up to a point where he has nothing left for essentials, then he will not make all of his payments on time. He may make them one month and have to skip two or three while he uses his income to pay other credits.



BIG MONEY FOR DEALERS, JOBBERS

With the Fastest Selling Fan Yet!

Completely packaged, everything that's needed, quality parts—at a very low price. Everybody's looking for low prices—your customers will snap 'em up. Fast selling—quick turnover—good profit!

WRITE FOR INFORMATION

S. J. STEWART ELECTRIC

527 St. Joseph St. New Orleans 12, La.

Some merchants issue credit as though they expect some miracle to happen and that this customer will somehow dig up the payments. If he doesn't get it, he can't pay it.

Repossessions are not the answer. It is better to avoid making a contract that looks like it had the repossession written up in advance.

This is the time to remember that the fundamentals of successful business have not changed. To stay in business you'll have to make your collections to pay your own bills. When your past-due receivables get large enough to over-balance your inventory and cash, it's dangerous.

Banks are eyeing bulky receivables questioningly — merchandise or cash in hand will always be better than receivables. You still can't do business without liquid capital and the banker will not accept the idea that your receivables are a big bunch of business you have done. When you go to the bank for money, the banker is likely to look at the receivables as money you ought to have collected and didn't.

Certainly you must compete with credit terms. You may need a scheme like the one Macy's department store is using which is designed to keep the customer sold up to the limit of his credit each month. They set up a certain amount of credit for the customer, such as $100. If he pays $10 on it this month, he can buy $10 more next month. They require one-sixth of the monthly purchases within the credit limit bracket reduced each month.

One of the best selling plans is to work out sales material to show the customer he can benefit most by paying for his purchase as quickly as possible—that he is better off as he can increase his equity—that you would be doing him no favor to make him long-time easy terms.

Government housing propaganda is responsible somewhat for the pressure for long-time terms. Home prospects have been reading about 50-year mortgages instead of 15- and 20-year mortgages. The fallacy of long terms has never been explained to them. You can tell them that $100 at six per cent interest costs $6 for one year, and that if you borrowed it for 50 years, it would cost them $300 and they'd still owe the principal.

Of course installment purchases are reduction loans by which the principal and interest are both reduced by each payment. You can show them how important it is to pay the principal and the interest as quickly as they can—because they can take the money they save and buy something else from you that they wouldn't otherwise have had.

Increase Cord Set SALES

TWO BIG-PROFIT DEALS

free Self-Selling DISPLAYS

YOUR CHOICE of two smartly finished wood displays, two fast-moving deals offering a DAVIS Cord Set for every need. Display No. 5, 8½" x 8½" x 16", holds 34 Davis sets; display No. 10, 20" x 20" x 8", holds 60 Davis sets. Each set is fully displayed and *tagged with informative, self-service label* to increase impulse buying, reduce sales time.

See YOUR JOBBER OR WRITE DIRECT FOR FULL DETAILS AND PRICES

DAVIS Mfg. Company

PLANO 1, ILLINOIS

Southeast Rep. H. K. Dewees Co. Watton Bldg., Atlanta, Ga. Southwest Rep. M. C. Hair Co. Thomas Bldg., Dallas, Tex.

Business Aids

(Continued from page 75)

the cash register. And one, who bought a store first and took inventory afterward, found he had paid $7,000 for a $3,000 stock.

There are many sources from which managers and potential managers of small business can improve their knowledge and skills in meeting the general requirements of business.

One principal source is your United States Department of Commerce. This "business man's representative in government" maintains field offices in a score or more of the principal cities over the South. Services of the Department to business men, small or large, are much more extensive than seem to be generally realized.

Available to all field offices are booklets describing how to establish and operate some 40 or more small businesses.

Besides the "Establishing and Operating" series of booklets, the department publishes and distributes free a series of "small business aids" which now runs to nearly 500 titles. These for the most part are reprints of useful articles which have appeared in trade publications on needs, methods, and opportunities in various lines of small business.

Sample titles from the Establishing and Operating series are listed, with the cost shown opposite each title. Do not send postage stamps when ordering. Personal check or money order payable to Treasurer of the United States is acceptable. Prompt shipments of all booklets listed will be made by writing the U. S. Department of Commerce field office nearest you.

Reaching More Prospects

(Continued from page 70)

who spends 40 hours per week, in the appliance department, telephoning a long list of homeowners.

With many years of appliance merchandising behind it, Maas Brothers is able to furnish her with voluminous files, in which are listed all major appliances bought by Tampa residents from the store for five years back. On the telephone, the telephone saleslady works entirely with previously sold customers, telephoning each during the week

For your needs in WASHER PARTS TRY

Refrigeration Supply Co.

1831 W. Broad St.

Richmond, Va.

which marks the end of the first year after the homeowner has purchased her first appliance.

"In brief, we consider that a previously sold customer matures as a new prospect one year after the first appliance is delivered," Mr. Keeler said. "The fact that we have already sold her is an excellent calling card, and merely through pleasant conversation, descriptions of our new appliance lines, credit plans, etc., the telephone saleslady can make enough appointments and develop enough prospect tips to keep the entire crew occupied."

Originally, it was considered that it would require the services of several telephone girls, to accomplish this result. Actually, however, so tremendous a percentage of bonafide prospects are produced that one is more than enough.

Lastly, Mr. Keeler has gone over heavily to the demonstration theory in selling every major appliance carried by the store. Feeling that the worst drawback to new refrigerator, washing machine, range, home freezer, laundry equipment, and other sales has been the prospect's unfamiliarity with new developments, Maas Brothers has simply determined that it will allow any prospect for any new appliance to try it out in her home, for a one-week to two-week period, before making up her mind to purchase it.

"It is simply the loan-out principle applied en masse," the buyer stated. "We make absolutely no restrictions on home demonstrations; the prospect merely needs to telephone in, and request that the appliance be installed in her home. At the end of the period, we either telephone, or send a salesman, and attempt to wrap up the deal there and then.

"Even though we have been putting out hundreds, we are counting on volume, and found that 85 per cent of such loanouts result in sales, actually five or six times as much business as could be accomplished by mere conversations at the doorstep. We figure that it is not expensive to deliver and pick up appliances for loan-out demonstrations in this way, inasmuch as we already operate a crew of seven trucks, out on delivery and service work each day, and the loan-out appliances are just several more stops on the schedule."

"All of the trucks, incidentally, are equipped with hydraulic liftgates at the rear, which does away with the muscle work in heavy refrigerator delivery, and are staffed by a crew of trained delivery men, who minimize the chance of marring or injuring the appliance."

Finally, in all of its appliance advertising, Maas Brothers now

the NEW One Minute

COMPLETE NEW MONEY MAKING LINE

YOU can make more money with the new One Minute Washer line — the most bountiful One Minutes in three generations of building quality washers.
There's a One Minute for each of the five popular price fields—every model ruggedly built to give your customers trouble-free service week after week, year after year, thus protecting your profit. With the liberal proposition.
Style loader drain tub — entirely new. One piece, pressed from steel. Gleaming white inside and out. Finished with "Superclad." Selling like hot cakes. Investigate!

ONE MINUTE WASHER COMPANY
KELLOGG, IOWA

CTI PROPERLY TRAINED MEN HAVE THE "KNOW HOW"
PRACTICAL SHOP TRAINING
in
ELECTRICITY, MAJOR APPLIANCE
Service, Maintenance, Installation
Write for Catalog ES5—Veterans ask about GI Training
Manufacturers, distributors, etc., when you need TRAINED men contact CTI Placement Bureau.
COMMERCIAL TRADES INSTITUTE INC.
of Alabama
200 South 20th St., Birmingham, Ala. — Phone 7-0555
Member: Southern Association of Private Trade Schools

FRIGID FANS
NOT BY CHANCE BUT BY DESIGN.
• PEDESTAL FANS • HASSOCK FANS
• SPRAY BOOTH FANS • WINDOW FANS
• EXHAUST FANS • ATTIC FANS
• AUTOMATIC SHUTTERS • BLOWERS
Southeastern Representative & Warehouse:
W. H. BERRY COMPANY
45-47 Alabama St., S.W. Atlanta, Georgia
CIRCULATORS & DEVICES MFG. CORP.
Brooklyn, New York

includes a coupon which invites the reader to send it in, either for information on the trade-in value of their old appliance, or for literature on new appliances.

"We found a long time ago that people would not respond to such a coupon invitation if it included a notice that a salesman would call," Mr. Keeler said. "Now, however, we simply do not specify how the information is to be delivered—and a Maas Brothers salesman shows up actually carrying the requested items. This gives us entry into a lot of homes in which we have had no previous sales, and it is surprising the number of prospects who have been developed in this way."

Triple-Duty Truck

(*Continued from page 71*)

or scratched. The company's tallest employee—even a man 6 feet, 4 inches tall—can work inside the truck body without stooping.

When a set is delivered to a home, plugged in, and turned on, the owner is invited to step inside the truck and see if an antenna would improve his reception.

The truck is parked close to the house. Servicemen turn on the generator which powers the testing equipment and the monitor screen. They show the customer the picture on the screen without any antenna—the same picture which is being received on his own set. Then they attach the telescopic antenna.

Raising the antenna slowly and turning it in different directions, the engineers find the perfect direction and height for that area when the most efficient wave pattern appears on the cathode ray oscillograph. The customer compares the reception with no antenna to the reception obtained with the antenna that is scientifically positioned.

If he decides to buy an antenna, it is installed immediately with the tools and ladder carried on the truck.

This demonstration increases sales of service and equipment. But more important, it provides the customer with the best possible reception, makes him more satisfied with his new set, and sells him on the value of the company's service facilities. He also becomes a booster and sends other customers to Electro-Crafts Television.

The truck is a powerful sales and service builder. The public address system reaches hundreds of persons daily, calling their attention to the name and telephone number on the body.

Owners are invited inside the truck while their radios or television sets are repaired. Servicemen then have an opportunity to get acquainted with customers and show them the unusual equipment.

This helps make one-time customers regular patrons of the traveling repair shop. It helps sell new television sets, too, because it convinces customers that Electro-Crafts has the equipment to install their sets correctly, and to give them the kind of service they want.

Here IS Something NEW under the Sun...

Pat. No. 2247276

Attic Fan performance at 1/2 the cost . . . with the NEW Koolmaster Awning Fan!

The New Koolmaster Awning Fan offers a chance to retail complete home ventilating for less than $100.00.

This means . . .

- More Homes Ventilated
- More Sales
- More Profits for You

The Koolmaster Awning Fan is a package unit. No storage problems—no installation problems.

It's a 24" fan, 5000 CFM, 1/4 H.P. motor. Will fit 28", 30", 32", 36" windows.

Complete specifications, price list and dealer information on request.

Write today Dept ES *Reg. Trade Mark

Exhausts out upper half of window.

AIR EQUIPMENT CO.

1713 W. Carroll Ave. • Chicago, Ill.

Also manufacturers of KOOL-MASTER Window and Portable Window Fans, NITECOOL Attic Type Fans, for horizontal or vertical installation.

'tis a CORDinal sin

to handicap a fine modern electric appliance with a poor cord set. Your customers should have the BEST. For sure contact and longer life on the job...for an end to CORD*elirium* . . . see to it that they get

CORNISH

CORDS and CORD SETS

APPROVED BY UNDERWRITERS LABORATORIES

Selected by leading manufacturers . . . why not by YOU

A full line of Flexible Cords for the Repair and Service industry, obtainable through Jobbers and Distributors

CORNISH WIRE COMPANY, INC.

15 Park Row New York 7, N. Y.

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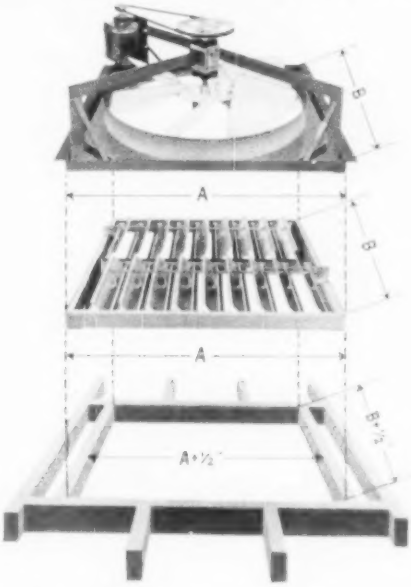
The *REED* Vertical Air Discharge Attic Fan



Requires An Attic Clearance of ONLY 13⅜"

INSTALLATION DATA		
MODEL	FAN and SHUTTER A	B
RVU-24	32"	32"
RVU-30	36"	36"
RVU-36	42"	42"
RVU-42	48"	48"

CASH in on the increasing demands of thousands of home owners for the new, popular "lay down" Reed Attic Fan. Depend upon a Reed for low cost of installation, quietness, powerful air delivery and trouble-free service.

Write for Free, Completely Illustrated Catalog

Certified Ratings — PMA

Reed UNIT-FANS, INC.

Manufacturers of Ventilating Equipment

1001 St. Charles Ave.

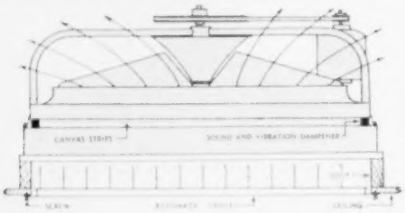
New Orleans 8

Get set for Bigger Sales with the great

Quietaire

THE REVOLUTIONARY ATTIC FAN THAT

SELLS FOR LESS, OFFERS BIGGER DEALER PROFITS



NOW is the time to contact

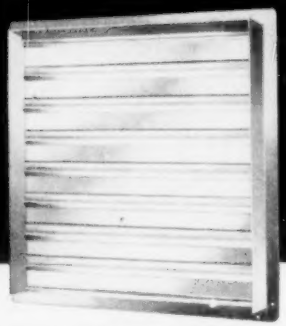
QUIETAIRE CORPORATION

505 N. Hutcheson Ave. Houston, Texas

Distributed by

WESTINGHOUSE ELECTRIC SUPPLY CO.

they all want **AIR-FLO**



FRONT VIEW—CLOSED

MODEL A-555

THE AUTOMATIC SHUTTER WITH ALL THE FEATURES

IT TAKES THE LOAD OFF THE FAN!

Aluminum louvers open fully, permitting capacity fan operation. New heavy reinforcement strip adds strength and long life to the louvers, assures quiet operation and perfect counterbalance, prevents rattling. Deep shroud protects shutter from high winds. Tie-rod, brackets and bearings inside frame, not exposed to weather. Special finish resists corrosion. Many other features.

WRITE FOR NEW AIR-FLO CATALOG 43-B

Illustrations and details of the complete Air-Flo line

AIR CONDITIONING PRODUCTS CO.

2340 W. LAFAYETTE BLVD. • DETROIT 16, MICH.

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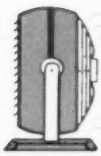
MODEL 1528

Dominion HEAT-R-FAN

DOES DOUBLE DUTY FOR YEAR 'ROUND SERVICE

ONLY $15.95, SLIGHTLY HIGHER IN WEST

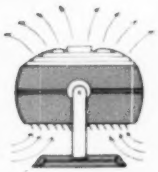


WARM AIR WHEN IT'S COOL

Fan forced heat like a tropical breeze for moderate size rooms. Beautifully finished in durable baked enamel of a rich shade. Built-in handle — non-marring feet. This modern design, dual purpose "Heat-R-Fan" at its very reasonable price is bound to be a heavy favorite in both moderate and extreme temperature zones.

COOL AIR WHEN IT'S WARM

When the weatherman turns on a scorcher the flick of a switch starts a refreshing breeze. For office or for home! Motor is non-radio and non-television interfering. Is of rugged construction to stand up under the year 'round use to which it will be put.



EFFECTIVE AIR CIRCULATOR

Finger-tip tilting changes air stream direction from 10° below horizontal to vertical position. For maximum effectiveness as a circulator, place it under table or chair. This feature has real sales value! Circulated air is more comfortable — more healthful.

Write for complete specifications — available through reputable distributors across the nation.

BREW-O-MATIC

Completely Automatic

COFFEE MAKER

Handsome, modern design — highly polished aluminum finish. "Flavor Selector" for mild or strong coffee according to taste. Automatic control keeps coffee at serving temperature. Many other special features.

Dominion APPLIANCES

THE BEST - FOR THE REST OF YOUR LIFE

DOMINION ELECTRIC CORPORATION - MANSFIELD, OHIO

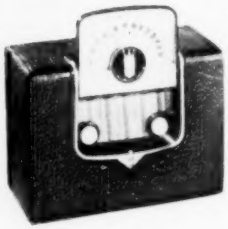
America's millions on the move mean BIG MONEY for you with... ZENITH PORTABLE RADIOS!

AMERICA'S FINEST PORTABLE

A summer-long parade to resorts, picnics, beaches, sports events, camps—to countless places from coast-to-coast—will boost Zenith Portable Radio sales to all time highs! Anyone who goes anywhere wants to take their entertainment with them—so make the most of Americans on the move. Sell Zenith Portables!

The *TRANS-OCEANIC* is Always a Best Seller

Outperforms any portable, anywhere. The one set to sell when customers want long-range reception. Gives standard plus International Short Waves on 5 separate bands. Humidity-Proofed against loss of sensitivity. For AC/DC or battery. $99.95† less batteries



The New *UNIVERSAL*® Sets New Sales Records!

Grand, new super-powered long distance Zenith portable, with newest short features. Plays on AC/DC or battery. Ivory finish, buffed-grained case in Black, Brown, $49.95† less batteries

Tops for Turnover *TIP-TOP HOLIDAY*®

Giant "Tip-Top" Dial with built-in Wavemagnet swings up above the set for bring-your-distance-the-sensitivity-of-reception. For AC/DC or battery. Color set of Ivory or Dark Brown Blue Grey plastic. $39.95† less batteries

Powerful and Popular *ZENITH ZENETTE*®

Hardly bigger than your hand—yet plays with big set volume and tone! Open lid—set is on—close lid—set's off. Weighs but 3½ lbs. Battery or AC/DC operation. In Burgundy, Ebony or White plastic. $39.95† less batteries

†Suggested retail price. West Coast and far South prices slightly higher. Prices subject to change without notice.

®Reg. U. S. Pat. Off.

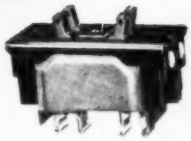
ZENITH RADIO and TELEVISION — THE ROYALTY OF RADIO AND TELEVISION

ZENITH RADIO CORPORATION
6001 DICKENS AVENUE • CHICAGO 39, ILLINOIS

New "PLUG-IN" MULTI-BREAKER NMO PANELETTE

"OFF-THE-SHELF" companion to the popular NMO Panelboard, the low cost Panelette meets most A.C. lighting and appliance circuit SWITCHING and PROTECTION requirements. Standardized components stocked by authorized Square D Distributors everywhere.

Construction. Box only 12" W x 4½" D, yet easy to wire ... door with locks ... lugs only from 4 to 28 circuits or circuit breaker mains from 4 to 20 circuits ... 1ϕ, 3 wire or 3ϕ, 4 wire ... flush or surface ... 15, 20, 30, 40 or 50 Ampere "Plug-In" units interchangeable with NMO Panelboard and MO 12 or MO 20 load centers.



Cutaway showing circular bus bar onto which breaker units are plugged. Twist-outs close openings provided for future use.

THERMAL-Critless MAGNETIC BREAKER UNITS GIVE 2-WAY PROTECTION

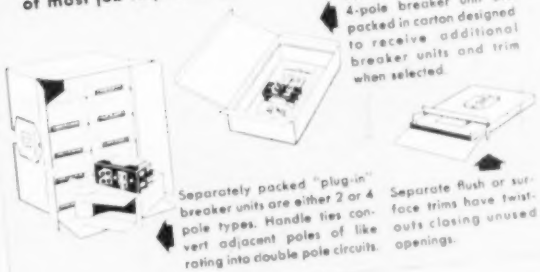
Thermal Element responds to heating effects of both load current and surrounding atmosphere. Total temperature is limited to a safe value.

Magnetic Element responds instantly to heavy overloads or shorts.

Both Elements are needed for complete protection!

START WITH 4 . . . ADD MORE

Small Stock of Standardized Components takes care of most job requirements



Box, bus structure and one 4-pole breaker unit are packed in carton designed to receive additional breaker units and trim when selected.

Separately packed "plug-in" breaker units are either 2 or 4 pole types. Handle ties convert adjacent poles of like rating into double pole circuits.

Separate flush or surface trims have twist-outs closing unused openings.

Write for Bulletin 1600, Square D Company, 6060 Rivard Street, Detroit 11, Michigan

SQUARE D COMPANY

DETROIT • MILWAUKEE • LOS ANGELES

SQUARE D COMPANY CANADA LTD., TORONTO • SQUARE D de MEXICO, S.A., MEXICO CITY, D.F.

ANOTHER NEW TRUCK FOR TYLER!
HOW DO THEY DO IT?
WIRING BY
TYLER ELECTRIC CO. ELECTRICAL CONTRACTORS
I THINK I CAN TELL YOU HOW THEY DO IT. I WAS DOWN AT THE G-E DISTRIBUTOR'S THE OTHER DAY WHEN CHARLIE TYLER WALKED IN, AND....
HI, CHARLIE! STILL THE BIGGEST G-E BOOSTER IN TOWN?
ABSOLUTELY! AFTER ALL, I'VE BUILT MY REPUTATION ON GENERAL ELECTRIC. MY CUSTOMERS KNOW THE G-E NAME, AND I KNOW I CAN TRUST G-E PRODUCTS.
AND, YOU KNOW, CHARLIE, YOU'RE KEEPING YOUR INVENTORY DOWN BY HANDLING ONLY G-E PRODUCTS.
RIGHT AGAIN. I DON'T NEED TO STOCK ITEMS FROM HALF A DOZEN MANUFACTURERS. ONE LINE IS ALL I NEED.
WHILE I'M AT IT, I MIGHT AS WELL ADMIT THAT I LIKE YOUR SERVICE. YOU AND THE GENERAL ELECTRIC FIELD MAN HAVE HELPED ME OVER A LOT OF ROUGH SPOTS... SAVED ME A GOOD MANY HOURS ON PROBLEM JOBS.
NOW THAT WE'RE THROUGH TOSSING OUT BOUQUETS, WHAT CAN I SELL YOU?
HERE'S MY ORDER. AND MAKE SURE IT'S ALL GENERAL ELECTRIC.
SO, THAT'S THE SECRET OF TYLER'S SUCCESS. IT'S G.E. FOR ME FROM NOW ON.
LATER
THANKS FOR YOUR HELP. YOU'LL BE SEEING A LOT OF ME!
ANY TIME. AND, WHILE WE'RE TALKING ABOUT GENERAL ELECTRIC SERVICE, YOU'LL BE INTERESTED IN THIS NEW AVA CABLE BULLETIN. TAKE A COPY WITH YOU.
FOR UP-TO-THE-MINUTE INFORMATION ON G-E WIRES AND CABLES, G-E CONDUIT PRODUCTS, G-E WIRING DEVICES, SEE YOUR GENERAL ELECTRIC CONSTRUCTION MATERIALS DISTRIBUTOR. OR WRITE TO SECTION 1.2 B24, CONSTRUCTION MATERIALS DEPT., GENERAL ELECTRIC CO., BRIDGEPORT 2, CONN.
GENERAL ELECTRIC
CONSTRUCTION MATERIALS DEPARTMENT